This guidance is out of date and under review

See current guidance on infection prevention and control in adult social care settings.



Prevention and control of infection in care homes – an information resource



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For Recipient's Use		

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Executive summary

The steps taken in care homes to protect residents and staff from infection represent an important element in the quality of care, particularly as some infections have the capacity to spread within environments where susceptible people share eating and living accommodation. It is also important to be aware of the possibility of infection in residents and for care workers to identify these promptly.

Infections acquired in care homes may be serious and, in some cases, lifethreatening. These may worsen underlying medical conditions and adversely affect recovery. Infections may be caused by organisms resistant to antibiotics and the high media profile they generate may alarm residents, their relatives and carers.

It is therefore important that clear information on the standards of infection prevention and control in care homes is available to allow informed choice and promote confidence in the quality of care provided. Families and carers will want to be assured that the care their relatives and dependents receive is provided in a clean and safe environment.

This resource aims to provide care home mangers, Care Quality Commission inspectors and Health Protection Units a common source of information on the prevention and control of infection in care homes. Not all information in the resource will be relevant to all care homes.

This information resource for care homes was developed by the Department of Health (England) and the Health Protection Agency in conjunction with the Care Quality Commission. Blank page

Part 1 Organisation and management

1.1 Introduction

This aim of this document is to:

- assist staff in taking all reasonable steps to protect both residents and staff from acquiring infections and cross infection; and
- provide information and guidance on infection prevention and control that will assist managers undertaking risk assessments and in developing policies.

The document updates Infection Control Guidance for Care Homes (Department of Health, 2006) and should be read alongside The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections and related guidance (Department of Health, December 2010) ('The Code').

1.2 The Code

The Code sets out what registered providers of health and adult social care services need to do to ensure compliance with the Care Quality Commission (CQC) registration requirements for cleanliness and infection control, which is set out in regulations.

The Code does not replace the requirement to comply with any other legislation, for example, the Health and Safety at Work etc, Act 1974 and the Control of Substances Hazardous to Health Regulation 2002.

The table below is taken from *the Code* and details the 10 criteria against which registered providers will be assessed on how they comply with the registration requirement for cleanliness and infection control.

Not all criteria will apply to every regulated activity and it is hoped that the information that follows will help managers interpret the criteria, undertake risk assessments and, develop their policies and procedures.

Compliance criterion	What the registered provider will need to demonstrate
1	Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider how susceptible service users are and any risks that their environment and other users may pose to them.
2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.
3	Provide suitable accurate information on infections to service users and their visitors.
4	Provide suitable accurate information on infections to any person concerned with providing further support or nursing/medical care in a timely fashion.
5	Ensure that people who have or develop an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of passing on the infection to other people.
6	Ensure that all staff and those employed to provide care in all settings are fully involved in the process of preventing and controlling infection.
7	Provide or secure adequate isolation facilities.
8	Secure adequate access to laboratory support as appropriate.
9	Have and adhere to policies, designed for the individual's care and provider organisations that will help to prevent and control infections.
10	Ensure, so far as is reasonably practicable, that care workers are free of and are protected from exposure to infections that can be caught at work and that all staff are suitably educated in the prevention and control of infection associated with the provision of health and social care.

Table 1

The Code of Practice and related guidance provides information for providers to assess their compliance with the Code.

Part 1: Introduction

This explains what and who *the Code* is for, how it will be used and, how compliance will be assessed.

Part 2: The Code of Practice

This sets out the 10 criteria in the table above against which CQC will assess how a registered provider is complying with the cleanliness and infection control registration requirement.

Part 3: Guidance for Compliance

Provides guidance for registered providers to interpret the criteria and develop their own risk assessments.

Part 4: Guidance tables

Designed to help providers and leads for Infection Prevention and Control to decide how the *Code of Practice* and its related guidance applies to the registered activities and type of service they provide.

Appendices

There are appendices at the back of *the Code* that provide examples of how it could be applied in different care settings. Appendix A provides examples relevant to adult social care. **Please note**: These examples should not be read in isolation; they only provide additional information to the guidance for compliance in Part 3 of *the Code*.

1.3 Terminology and definitions

The term 'resident' is used throughout this document rather than service user, person or patient.

The term care worker is used to refer to any employee whose normal duties involve providing direct care to residents, for example healthcare assistants, care assistants, etc.

The 'environment' means the totality of a resident's surroundings when in care premises. This includes the fabric on the building and related fixtures, fittings and services such as air and water supplies.

1.4 Guidance on the prevention and control of infection

Good infection prevention and control are essential to ensure that people who use health and social care services receive safe and effective care. Effective prevention and control of infection must be part of everyday practice and be applied consistently by everyone.

A range of supporting national guidance is available within *the Code* bibliography. Although most of these guidance documents were written for the NHS and prior to the establishment of the CQC and its registration requirements, there will be elements that are relevant to other registered providers. How they are used is a matter for local determination. In addition, the CQC have published guidance about compliance, including their judgement framework and will use these documents in conjunction with *the Code* when assessing compliance.

1.5 Roles and responsibilities

All care homes should have in place a written policy that details the roles and responsibilities of staff in respect of the prevention and control of infection. This should include roles and responsibilities for the management of outbreaks and incidents of infection. The following lists key roles and responsibilities of individuals and organisations involved:

The registered provider is any person, partnership or organisation who provides one or more of the regulated activities and is registered with the CQC, as a registered provider of that service or those services. The registered provider of a care home is responsible under health and safety legislation for maintaining an environment which is safe for residents, visitors and staff alike. Suitable arrangements and procedures for prevention and control of infection would form part of the health and safety requirements.

The registered manager is an individual who is registered with the CQC to manage the regulated activity at particular premises where the registered provider is not in day to day charge. The manager should have access to advice on infection prevention and control from a suitably qualified individual. It is expected that the registered manager will produce an annual statement (see **Appendix 1**) on the systems in place for the prevention and control of infection and how these are monitored.

The report should contain a short review of:

- information on incidents and outbreaks of infection;
- how the incident or outbreak was communicated to staff, visitors etc;
- infection prevention and control audits;
- risk assessments;
- training and education of staff;
- review and update of policies, procedures and guidance; and

• the actions that have been taken to rectify any complaints or incidents in relation to infection prevention and control.

The registered manager should ensure that they must have regard to the Code of Practice in developing appropriate infection prevention and control policies and procedures that are readily available and appropriate to the home, understood by all members of staff. These should be implemented and monitored.

In small care homes the registered provider and the registered manager maybe the same individual.

The Care Quality Commission (CQC) is the independent regulator of health and adult social care in England. It aims to ensure that better care is provided for everyone, whether in hospital, care homes, people's own homes, or elsewhere. It regulates health and adult social care services, whether provided by the NHS, local authorities, private and independent providers or voluntary organisations. It also protects the rights of people detained under the Mental Health Act. Its work brings together independent regulation of health, mental health and adult social care.

There are a variety of stakeholders whose services may be called upon for advice on infection prevention and control. These include:

The Health Protection Agency (HPA), through its local Health Protection Units (HPUs), is responsible for the control of infectious disease within the community. However, although HPUs will wish to ensure that appropriate infection prevention and control arrangements are in place in local care homes, they are not responsible for providing a routine infection prevention and control service directly to care homes.

The role of the local HPU is to monitor and investigate outbreaks of infection and advise on the control and prevention of infections in the care home. The HPU will decide if an outbreak is being managed effectively and will initiate and co-ordinate any necessary action to limit further spread. They will advise the registered manager of any immediate action necessary for infection prevention and control. This may require the identification of those at higher risk and separation of those who have symptoms from those who do not. If the infection is primarily food-borne, the local authority Environmental Health Practitioner may lead the investigation with the support of the local HPU.

The Community Infection Prevention and Control Practitioner (CIPCP)

may be employed by the primary care provider and in some instances provides advice, education, training, policy development and audit functions to the community, including care homes.

The General Practitioner (GP) is responsible for the diagnosis and treatment of all those registered under their care. The GP has an ethical responsibility to consider the implications of a diagnosis of an infectious disease for the health of the public.

Liaison with the local HPU is important in infectious disease control; the GP is responsible for notifying the local HPU of certain infectious diseases (see **Appendix 2**). The GP also has a responsibility to prescribe appropriate antibiotics for the appropriate duration and be mindful of the link between antibiotic prescription and *Clostridium difficile* infection. The GP is also responsible for following the local antimicrobial prescribing policy and being aware of advice from the local Medicines Management Team, which includes the primary care provider pharmacy advisors.

The Environmental Health Practitioners (EHPs) work for local authorities as Environmental Health Officers (EHOs) who advise on the management of food safety, including hygiene, kitchen design, pest control and waste disposal. EHOs are also responsible for the control of pollution and other environmental nuisances. Their duties include the inspection of food premises, as well as enforcing the provisions of the UK laws and the EU food hygiene legislation. The EHPs also investigate complaints about food and collaborate with the local HPU in the investigation of outbreaks, particularly of food or water-borne illness.

1.6 Monitoring and reporting of infections

Any member of staff working in a care home environment has a duty to notify their line manager if they suspect an infection. The manager of the care home should inform the HPU if they suspect that there may be an outbreak of an infection or infectious disease - that is two or more residents present with the same symptoms of an infection. Prompt notification and reporting of cases of infectious disease to the HPU is essential for the monitoring of infection, and allows for early investigation and prompt control of its spread. The current system of mandatory reporting of specific infections to the HPA as applied to the NHS does **not** apply to care homes.

Each facility should have an outbreak management plan that outlines communication procedures with others e.g. GP, HPU, CIPCP and what information needs to be gathered to enable a risk assessment to be made.

Certain cases of infectious disease, whether confirmed or suspected, must be notified by the resident's GP to the Proper Officer of the Local Authority (who may be part of the local HPU team) under the Health Protection (Notification) Regulations 2010.

The proper officer will inform the HPU of such cases. It is recommended that cases of other infectious diseases, which are **not** statutorily notifiable (e.g. scabies) should be reported by the GP or the Registered Manager (or deputy) to the HPU when an outbreak is suspected.

A record should be kept of the following information on residents, with suspected or confirmed infections or infectious disease (see **Appendix 3**).

- name, age / date of birth;
- GP's name and address;

- date of onset of symptoms and cessation of symptoms;
- type of symptoms;
- samples taken and sent;
- diagnosis;
- source of infection, if known;
- contacts family, staff, visitors;
- outcome;
- whether the case was notified/ reported to Proper Officer/HPU and date of reporting.

Information should also be kept for any staff members that develop similar symptoms.

1.7 Risk assessment

Risk assessment is an important step in protecting residents and staff as well as complying with the law. The assessment helps focus on the risks that have the potential to cause harm and in this context, from the harm of acquiring an infection. In most instances, straightforward measures can readily control risks e.g. ensuring that clean and dirty linen are segregated to prevent cross contamination. The law does not expect that all risks will be eliminated, but requires that all steps that are reasonably practicable are taken to protect residents.

The risk assessment is simply a careful examination of what could cause harm to residents in the workplace, including the risk of infection so that an assessment can be made on whether enough precautions have been taken to prevent harm.

How to assess the risks in the care home:

- Identify the hazards e.g. blood borne viruses, gastrointestinal viruses.
- Decide who might be harmed and how.
- Evaluate the risks and decide on precautions.

- Record the findings. Communicate and implement them.
- Review the assessment and update if necessary.

In many organisations, the risks are well known and the necessary control measures are easy to apply. In some smaller organisations, managers are often confident of understanding what is involved, and do the assessment themselves. In larger organisations, a health and safety advisor, or infection prevention and control advisor is sometimes brought in to help. In all cases, care staff should be involved in the process. They will have useful information about how the work is done which will make the assessment of the risk more thorough and effective.

A *hazard* is anything that may cause harm, such as chemicals, electricity, an open drawer, etc.

The *risk* is the chance, high or low, that somebody could be harmed by these and other hazards, together with an indication of how serious the harm could be.

In order to achieve compliance with the registration requirement, registered providers should ensure that they have assessed the risks to residents relating to infection prevention and control. Identified risks should be recorded and steps taken to reduce or control those risks. The effectiveness of actions to reduce the risk of infection should be monitored.

1.8 Surveillance

HPUs have a local protocol for the dissemination of information about infections and outbreaks in their locality, which includes reports received from care organisations concerning residents and/or staff. This is to facilitate surveillance and optimal management of infections in the wider community.

1.9 Outbreak recognition and management

It is important to recognise potential outbreaks promptly and for care staff to implement control measures as soon as possible to prevent further cases. Staff must be aware of the signs of infection, particularly in the elderly, e.g. fever, diarrhoea or vomiting, unexpected falls and confusion. They must also know to report these signs immediately to senior management staff when they occur.

A number of infectious diseases may spread readily to other residents and/or members of staff or relatives and cause outbreaks. Care homes should have a documented outbreak plan appropriate to the services provided, detailing the actions to be taken in the event of an outbreak.

Definition of outbreak

An outbreak can be defined as two or more cases of infection occurring around the same time, in residents and/or their carers or an increase in the number of cases normally observed.

The commonest outbreaks are due to viral respiratory infections and gastroenteritis. The organisms may be spread by hand contact and on occasion by other routes, which may include food, (see Part 2, 2.1 Chain of infection).

1.10 Communication, action and documentation

Communication

Details regarding the outbreak need to be communicated to a variety of people including:

- the GPs of those residents with symptoms;
- the local HPU for advice;
- the Environmental Health Department for suspected food related outbreaks; and

- the resident's family and visitors (advice on visiting and other control measures may be necessary).
- Other care providers, if a resident is transferred.

An outbreak reporting checklist of information needed by the HPU can be found at **Appendix 9**.

Provision of relevant information across organisational boundaries is covered by the regulation requirement '*Co-operating with other providers*'. Due attention should be paid to service user confidentiality as outlined in national guidance and training material.

(Refer also to Outcome 6, Regulation 24 Cooperating with other providers contained in CQC Guidance about compliance)

Action

Effective communication of the outbreak needs to be made to **all** staff including, where relevant, agency staff and contractors outlining some of the key actions that may be necessary during the outbreak, which may involve the following actions:

- reinforce hand and respiratory hygiene messages for residents, staff and visitors;
- isolation of residents with infections;
- review of the care provided to residents with regard to IPC practices;
- enhanced cleaning schedules;
- provision of specific advice on the necessary control measures;
- enhanced observation to identify suspected new cases and if confirmed, implement necessary control measures;
- advise affected staff on exclusion from work;
- closure to new admissions;
- postpone day care visits and outside trips;
- delay readmission of a resident following discharge/transfer from hospital;
- restrict and/or stop visitors; and

 postpone visits from outside service providers e.g. hairdresser, podiatrist, etc.

Documentation

A record of the type of infection and how it was managed should be detailed in the residents' notes. There should also be a central record held containing all information regarding the outbreak (e.g. resident's details, onset date, symptoms, action taken).

There should also be a range of printed advice available for care staff, resident's family and friends and visitors, in a language that they understand and taking into account any cultural or language barriers, so that everyone is fully informed of the situation.

An outbreak of infection is likely to have resource implications for a care home. These may include the need for extra staff and the increased use of disposable items or laundry.

In some circumstances, it may be necessary to close the home to new admissions or visitors as a temporary measure. This will be on the advice of the local HPU.

1.11 Root Cause Analysis

Care home managers may be requested to contribute to a root cause analysis (RCA). This provides a retrospective review of an incident or event in order to identify:

- 1. What happened.
- 2. How it happened.
- 3. Why it happened.
- 4. How solutions can be developed and fed back to staff.

RCA can be used with groups of staff as an investigative tool and helpful learning exercise to identify why an incident occured, or why there is a series of near-miss incidents and a means of sharing the learning. The analysis is then used to identify areas for change, recommendations and solutions that aim to minimise the recurrence of the incident in the future.

Where there have been occurrences of infection it may be useful to carry out this type of investigation to identify and understand any improvements to care or to reduce the risk of recurrence.

A number of templates, information and reporting tools to assist with RCA are available from the National Reporting and Learning Service at: www.nrls.npsa.nhs.uk/resources/?entryid45=59847

1.12 Visitors

Most relatives and friends appreciate the risk of spreading infection to vulnerable people. Potential visitors should be advised to telephone for advice before visiting if they have current symptoms of infection. Visitors should be requested to help staff to keep the risk of spread of infection to a minimum and it may be helpful to display notices asking visitors who have symptoms of infection, particularly relating to respiratory or gastrointestinal tract, skin or eyes, to speak to the nurse or person in charge before seeing any residents. This applies especially to young children who are more likely to spread infection to elderly relatives. The local HPU/CICN can advise on relevant infection control precautions that may be required.

It may be necessary for staff to explain that under certain circumstances visits should be restricted or postponed.

All visitors should be encouraged to either wash their hands or use an alcohol hand rub at the start and the end of each visit.

1.13 Education and training

Some of the caring activities involved in health and social care carry the risk of infection for both residents and their carers. It is important, therefore, that staff are educated in the prevention and control of infection to promote evidence-based best practice. Training on the prevention and control of infection, as well as the links between antibiotic prescribing and *C.difficile* should form part of induction programmes for new staff and be included in ongoing training programmes.

It is good practice to keep records of all staff induction and ongoing training and to include training on the prevention and control of infection as part of job descriptions, personal development plans and appraisals for all staff groups.

It is important that all members of staff, from domestic through to senior management, have a clear understanding of their responsibilities to prevent the spread of infection, and are familiar with any infection prevention and control policies and procedures, that are in place.

In most settings, it has been found that regular audits of practice, and educational and constructive feedback to employees, has a beneficial role to play in developing the working practice of employees.

The Common Induction Standards developed by Skills for Care is the first step in any learning for the social care worker. The CIS should be carried out by every worker in social care. The effective implementation of the Common Induction Standards (CIS) is a significant step towards the delivery of high quality care and support. The Care Quality Commission's Essential Standards of Quality and Safety highlights the importance and value of strong and comprehensive induction and they will need to be assured that all new staff have undergone a thorough induction process.

The CIS contain reference to infection control by highlighting the initial knowledge around preventing the spread of infection. It includes routes by which infection can get into the body, effective hand hygiene, ways in which own health can pose risks, types of protective clothing and principles of safe handling of waste.

In addition Skills for Care have worked in partnership to develop a range of infection prevention and control units which can be taken either as individual units or as part of the health and social care diplomas which have now replaced NVQs and are recognised as the qualifications of occupational competence within the sector. The units are at levels 2, 3 and 5 and include knowledge and competence units as below:

- Level 2 The Principles of Infection Prevention and Control
- Level 2 Causes and spread of infection Cleaning
- Level 2 Decontamination and Waste Management
- Level 2 Contribute to the support of infection prevention and control in social care
- Level 3 Supporting infection prevention and control in social care
- Level 5 Lead and manage infection prevention and control within the work setting

See the Skills for Care website for further information on Common Induction Standards and infection control units. <u>www.skillsforcare.org.uk</u>.

1.14 Occupational health

Appropriate policies, as described in *the Code*, should be available to ensure that residents are protected from staff with communicable diseases. Such policies should clearly set out the responsibilities of staff members to report episodes of illness to their manager – this is particularly important after travel abroad. When necessary, staff may need to be excluded from work until they

have recovered. Policies may differ between homes. Advice can also be sought from the local HPU (see **Appendix 4**).

Occupational health policies should include:

- offer of immunisation;
- training and compliance with health and safety legislation;
- initial health screening for communicable diseases, risk assessment of the need for immunisations and regular review of immunisation status; and
- management of exposure to infections which should include the local provision for emergency treatment (including out of hours and access to post exposure prophylaxis) and circumstances under which staff may need to be excluded from work.

Such policies should apply to all agency and locum staff and to those on short-term contracts.

All staff should have access to occupational health advice although small providers that are not part of a large organisational structure may not have such access. If so, the provider should ensure occupational health advice is available for example through their insurance company, a GP or an occupational health agency.

The provider should also ensure that all staff complete a confidential health assessment after a conditional offer of employment and give information about residence overseas, previous current illness, and immunisation against relevant infections, as well as ongoing health surveillance.

Prevention of occupational exposure to blood-borne viruses, including the prevention of sharps injuries

Prevention of occupational exposure to blood-borne viruses includes the application of standard infection prevention and control precautions and the safe handling and disposal of sharps immunisation against Hepatitis B as set out in *Immunisation against infectious diseases* (2006).

Policies need to be in place that set out actions to be taken if a staff member is injured by any needle or other sharp objects which may be contaminated by blood and body fluids (see **Appendix 5**).

Immunisation of care home staff

Influenza

 Influenza immunisation is highly effective in preventing the disease in working-age adults; Immunisation is also recommended for staff directly involved in social care, especially for staff in nursing and care homes that look after older people. Staff immunisation may reduce the transmission of influenza to vulnerable residents, some of whom may have impaired immunity and thus reduced protection from any influenza vaccine they have received themselves.

Hepatitis **B**

 Hepatitis B vaccination is recommended for the following groups considered at increased risk:

a) care workers who may have direct contact with human blood or bloodstained body fluids or with human tissues; this includes any staff who are at risk of injury from blood-contaminated sharp instruments or being deliberately injured or bitten by people; and

b) staff caring for those with learning difficulties.

Management of occupational exposure to blood-borne viruses and post exposure prophylaxis

The Health and Safety Executive have developed guidance on this topic -'Blood-borne viruses in the workplace – Guidance for employers and employees' (www.hse.gov.uk/pubns/indg342.pdf).

It is important that incidents in which staff are exposed to blood and certain body fluids are managed and followed-up appropriately, with the provision of post-exposure prophylaxis if necessary, as there is a risk of blood-borne virus transmission (Human Immunodeficiency Virus [HIV], hepatitis B and hepatitis C) (See **Appendix 5**). Post-exposure prophylaxis is most likely to be effective when initiated as soon as possible after an incident (within hours, and certainly within 48–72 hours of exposure).

In the care setting, occupational blood-borne virus transmission can occur after exposure to blood by 'sharps' or 'needlestick' injury. In some settings, there may be a risk of infection from human bites. Where a significant injury has occurred, the procedure outlined in **Appendix 5** should be followed.

Staff that may have come into direct contact with residents' blood or bloodstained body fluids or with residents' body tissues should be immunised against hepatitis B. (see immunisation section). There are currently no vaccines to protect against hepatitis C or HIV.

Employers should have a policy on how such incidents should be managed. Unless an employer has access to an occupational health service, it is likely that the assessment and follow-up of such incidents will need to be undertaken by their local Emergency Department and the individual's GP. In drawing up local policy, employers should clarify and confirm who will be able to provide such a service. Blank page

Part 2: How infections are spread

2.1 The chain of infection

Micro-organisms

Micro-organisms (eg bacteria and viruses) live in or on some parts of the body (e.g. skin, mouth, intestinal tract) and are known as the body's normal flora. Some of these may cause illness if they find their way into other areas of the body. An example of this is where micro-organisms normally found in the bowel enter the bladder and may then have the potential to cause infection.

Normal skin flora is known as 'resident' and is there continuously they are essential for good health. Resident bacteria rarely cause infection except in special circumstances such as during surgery or insertion of catheters and other invasive devices. Resident skin flora lives naturally on the skin and is difficult to remove by normal hand hygiene techniques, although the numbers of micro-organisms will be reduced by this process.

Many other micro-organisms are acquired or deposited on the skin from other staff or residents or from the environment and are known as 'transient'. These do not live permanently on the skin and are readily removed or destroyed by thorough and frequent hand hygiene.

The reservoirs of infection

The reservoirs of micro-organisms may be people, the environment or equipment. The human body is the most common reservoir for microorganisms. A person with salmonella, tuberculosis or hepatitis B may act as a source of infection to others because the micro-organisms are present in some of the body fluids and can be passed on to others.

Contaminated food may also act as a reservoir of infection. A common example of this is the presence of *Salmonella* spp. If food contaminated with

Salmonella is not thoroughly cooked, individuals who consume it can become infected.

The environment can also be contaminated by micro-organisms shed by people with an infection. This can then spread to others. Regular cleaning minimises this risk.

Poorly maintained or incorrectly decontaminated equipment can also act as a reservoir of micro-organisms. For example, inadequately maintained and shared commodes can be contaminated with micro-organisms that cause diarrhoea.

Point of entry

Every micro-organism needs to have an entry point into the human body; different micro-organisms have different ways of achieving this. For example salmonella bacteria need to enter the body through the mouth. Tuberculosis enters our bodies through the nose and mouth and then passes into the lungs and other parts of the body. Hepatitis B virus enters the body via the bloodstream. Organisms causing urinary tract infections may enter during poor catheter care.

Point of exit

As well as needing an entry point, micro-organisms also need an exit point. Salmonella bacteria are excreted through faeces. A tuberculosis bacterium uses the same entry and exit point, that is, the lungs, mouth and nose.

Method of spread or mode of transmission

All micro-organisms need a way of spreading. This varies with different types of organisms. Hands play a big part in spreading infection. Micro-organisms may be present in body excretions and secretions. If hands come into contact with these the micro-organisms may be carried from one person to another unless the hands are properly decontaminated. Some micro-organisms may be spread in the air. The viruses that are responsible for colds and influenza are found in nasal secretion, saliva and sputum. Coughing or sneezing near another person may pass on these viruses in the droplets or aerosol produced. Touching your face will contaminate your hands with these viruses.

Modes of transmission include:

- aerosol;
- droplet;
- faecal-oral;
- direct contact (person-to-person), often by contaminated hands;
- indirect contact (food, water, fomites [inanimate objects], the environment);
- blood and body fluid; and
- insects and parasites.

Susceptible host

Susceptibility to infection may vary from person-to-person and risk factors for infection include:

- age (the very young and very old are more vulnerable to infections);
- immune status;
- physical well-being;
- psychological well-being;
- hygiene;
- underlying or chronic diseases or medical conditions (e.g. diabetes, chronic chest and heart problems or cancer);
- other existing infections;
- medical interventions (e.g. an indwelling medical device); and
- medical therapies (e.g. cancer chemotherapy or steroids).

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Part 3: Basic infection prevention and control practices

Adherence to good practice in relation to infection prevention and control has been shown to reduce the risk of infection to residents and care workers. Providers should have relevant polices in place as identified by local risk assessment, and having taken account of the Code of Practice. Staff training is important and will improve compliance with policies, which should be regularly audited, updated and clearly marked with a review date.

It is not always possible to identify people who may spread infection to others and precautions for the care and treatment of all residents are recommended to prevent this spread of infection. Basic infection prevention and control practices are designed to reduce the risk of cross infection from both recognised and unrecognised sources of infection and should be applied at all times by all care workers. All those who provide care should be trained in understanding the basic infection prevention and control practices.

There may be parts of this section of the resource that will not be applicable to all care homes or care workers.

3.1 Standard infection control precautions

Standard principles: general advice

Everyone involved in providing care should be educated about the standard principles of infection prevention and control and trained in hand decontamination, the use of personal protective equipment, and the safe use and disposal of sharps.

Educate residents and carers about:

- the benefits of effective hand hygiene;
- the correct techniques and timing of hand hygiene;

- when it is appropriate to use liquid soap and water or hand rub;
- the availability of hand hygiene facilities.

Hand hygiene

Hand hygiene is widely acknowledged to be the single most important activity that reduces the spread of infection. Yet evidence suggests that many care workers do not decontaminate their hands when required nor use the correct technique. Hand hygiene should be performed immediately before and after every episode of direct person contact and after any activity or contact that could potentially result in hands becoming contaminated.

Staff should be trained in the use of liquid soap and water (see **Appendix 6**) and in the use of alcohol hand rubs (see **Appendix 7**). They should understand how and when this should be done. Alcohol hand-rubs should be located at the point of care. Where risk assessment has identified that hand-rub at the point of care is not appropriate, care staff can carry individual alcohol hand-rub dispensers.

Care workers should be reminded that alcohol hand-rubs are not suitable for use on hands that are dirty, contaminated and soiled (e.g. faeces, secretions) or during outbreaks of diarrhoeal illness (e.g. norovirus or *Clostridium difficile*) when washing hands with soap and water is necessary.

Hand hygiene facilities that include, as a minimum, a hand wash basin, supplied with hot and cold water, (preferably via a mixer tap), liquid soap and disposable paper towels, should be available and easily accessible. A lack of or inappropriate facilities should be brought to the attention of the Registered Provider or Manager of the care home who has a duty of care to ensure that there are adequate facilities and materials available to prevent cross-infection in the home.

Personal Protective Equipment

Selection of Personal Protective Equipment (PPE) should be based on an assessment of the risk of transmission of micro-organisms to the resident, and the risk of contamination of a care worker's clothing and skin by the resident's blood, body fluids, secretions or excretions.

Disposable gloves and aprons protect both the care worker and the resident from the risks of cross-infection.

Disposable gloves

As with all items of PPE, the need for gloves and the selection of appropriate materials should be subject to careful assessment of the task to be carried-out and its related risks to the resident and the care worker.

Gloves reduce the risk of contamination but do not eliminate it; therefore gloves are not a substitute for hand hygiene.

The assessment should include:

- who is at risk and whether sterile or non-sterile gloves are required;
- what the risk is, i.e. the potential for exposure to blood, body fluids, secretions or excretions; and
- where the risk is, i.e. contact with non-intact skin or mucous membranes during general care and any invasive procedures.

Disposable gloves are required when contact with blood or body fluids or nonintact skin is anticipated. They should be single use and well-fitting. Sensitivity to natural rubber latex in residents, carers and care personnel should be documented, and alternatives to natural rubber latex gloves should be available, e.g. nitrile gloves. Powdered latex gloves should not be used.

Gloves should be discarded after each care activity for which they were worn and before contact with other items such as door handles, curtains, telephones and pens. This will prevent the transmission of micro-organisms to other sites in that individual and to other residents.

It is never acceptable to wash gloves rather than change them.

Hands should always be decontaminated following removal of gloves as the integrity of gloves is not guaranteed and hands may become contaminated during their removal.

Disposable plastic aprons

These should be worn by care workers when there is a risk of clothing being contaminated with blood or other body fluids, or when a resident has a known infection. A disposable plastic apron should be worn during direct care, bed-making or when undertaking the decontamination of equipment.

The apron is as a single-use item used for one procedure or episode of care and then discarded as clinical waste on completion of the task.

Aprons should be stored so that they do not accumulate dust that may act as a reservoir for micro-organisms.

Face masks and eye protection

These should only be used when caring for residents on the advice of the infection prevention and control personnel, and may be required if there is a risk of blood and body fluid splash into the eyes, nose and mouth.

Safe handling and disposal of sharps

Staff should be trained in the safe handling and disposal of sharps. Venepuncture and injections should only be carried out by trained staff.

• Sharps **must not** be passed directly from hand to hand, and handling should be kept to a minimum.

- Needles must not be recapped, bent, broken or disassembled before use or disposal.
- Consider the use of needlestick prevention devices where there are clear indications that they will provide safe systems of working for care workers.
- Used sharps must be discarded into a sharps container conforming to current standards at the point of use by the user. These must not be filled above the mark that indicates that they are full. Containers in public areas must be located in a safe position, and must not be placed on the floor. They must be disposed of by the licensed route in accordance with local policy.
- Sharps containers should be taken to the point of use.

The Health and Safety Executive have developed guidance on this topic which can be found at www.hse.gov.uk/healthservices/needlesticks/.

Aseptic technique

Aseptic technique is a term used to describe clinical procedures that have been developed to prevent the contamination of wounds and other susceptible body sites.

The principles of asepsis/aseptic technique require that:

- exposure of a susceptible site is kept to a minimum;
- appropriate hand decontamination is performed prior to the procedure;
- sterile gloves are used if susceptible body sites are likely to be touched or if sterile parts of devices need to be handled during a procedure;
- all fluids and materials used are sterile;
- sterile packs are checked for expiry date and for evidence of damage or moisture penetration;
- contaminated/non-sterile items are not placed in the sterile field;
- single-use items are never reused; and
- movement in the immediate vicinity of the area in which the procedure is to be performed is minimised.
The principles of asepsis play a vital role in the prevention of infection in all environments. It is the responsibility of each staff member to understand these principles and to incorporate them into their everyday practice, where this is applicable.

Use and care of invasive devices

Invasive devices such as a urinary catheter or intravenous line will increase a resident's risk of acquiring an infection and the care home should have a policy in place for the care of invasive devices, the policy should be audited on a planned basis. Where residents have an invasive device in place, this should be fully documented in the care plan and the resident should be monitored for signs of infection. Staff should be trained in the care of residents with invasive devices and in how to recognise signs and symptoms of infection.

Urinary catheter care

Residents with a urinary catheter in place are at an increased risk of acquiring an infection. Bacteria can enter the urethra at the point where the catheter enters the body. The date of catheter insertion and the indication for catheterisation should be recorded in the resident's notes. The resident's clinical need for catheterisation should be reviewed regularly by the GP or district nurse and the urinary catheter removed as soon as possible. The following advice will minimise the risk of the resident acquiring an infection.

Handling the catheter

- Hands should be washed and a clean pair of non-sterile gloves should be put on before handling the catheter or drainage bag. Hands should be cleaned again after removing gloves.
- The point at which the catheter enters the body should be cleaned daily with soap and water.

Managing the drainage system

- The drainage bag or catheter valve should be connected to the catheter at all times, except when changing the bag. This 'closed system' reduces the risk of infection.
- At night, the special night drainage bag should be added without breaking the closed system.
- The drainage bag should be kept lower than the bladder to allow urine to drain.
- The bag should not be allowed to touch the floor because this can increase the infection risk. Catheter bag stands should be used.
- The drainage bag should be emptied regularly to maintain the flow of urine.

Enteral feeding

Enteral feeding (sometimes called enteral nutrition or artificial feeding) is prescribed for those who cannot eat normally. Liquid feed is given through a fine tube that enters the body by one of three ways:

- through the nose into the stomach naso-gastric feeding;
- directly into the stomach gastrostomy or PEG feeding; and
- directly into the small bowel jejunostomy feeding.

Important points about enteral feeding

- Feed should be stored according to the manufacturer's instructions.
- Hands should be cleaned thoroughly before preparing the feed or touching the equipment.
- Equipment should be handled as little as possible.
- The insertion site or stoma (the place where the feeding tube enters the body) should be cleaned with water every day and dried well.
- To prevent blockage, the enteral feeding tube should be flushed with fresh water before and after feeding or administering medications. Enteral feeding tubes for people whose immune system are not functioning properly (who are 'immuno`suppressed') should be flushed with either

cooled freshly boiled waster or sterile water (not bottled mineral or table water) from a freshly opened container.

- Minimal handling and an aseptic technique should be used to connect the administration system to the feeding tube.
- A pack of pre-packed feed can be used for up to 24 hours in a feeding session. Feeds that have been prepared on site should not be used for longer than 4 hours in a feeding session.
- After each session the bags and administration sets should be disposed of as household rubbish.

National Institute for Health and Clinical Excellence (NICE): *Prevention and control of healthcare-associated infections in primary and community care* (March 2012) Clinical Guideline 139 www.nice.org.uk/nicemedia/live/13684/58656/58656.pdf

Sharps management when using glucose monitoring devices

Routine diabetes care involves monitoring blood glucose levels by taking a sample of capillary blood with a fingerprick lancing device and testing it with a glucometer.

Outbreaks of hepatitis B in care homes have been caused by the use of the wrong type of lancing device to take capillary blood samples. Investigations of such incidents indicate that standard precautions and recommendations about using the correct type of lancing device may not have been followed. This highlights a need for adherence to standard precautions as well as specific infection prevention and control recommendations for diabetic care procedures.

There are 2 types of lancing device available. These are:

 disposable single-use devices (where the lancet and firing mechanism are one unit and the complete unit is disposed of after use); and re-usable lancing devices (where the lancet and the firing mechanism are separate units, and only the lancet is disposed of after use as the firing mechanism can be used again).

It can be difficult to distinguish between the reusable lancing devices that can be used by care staff for more than one resident and those that cannot (those designed for resident's own use). This confusion has led to care workers using the wrong type of re-usable lancing device, and has led to cross infection between residents (and needle stick injuries to care workers).

It is the responsibility of the care home management to ensure that the right type of lancing device is used, and there must be policies, procedures and regular training on testing residents with diabetes.

In care homes where there is a risk of confusion between devices (for instance if a residents who self tests brings their own re-usable lancing device into the care home) the use of disposable single-use lancing devices (which are easy to distinguish from re-usable devices) throughout the care home is considered the safest option.

Pathology specimens

Guidance on specimen collection and supplies of containers, plus confirmation of transport requirements, should be obtained from the local laboratory supplying the diagnostic service.

All specimens must be safely contained in an approved leakproof container. This must be enclosed in another container, commonly a sealable polythene bag. The request form should be placed in the side pocket of the polythene bag and must not be secured with clips or staples, as these may puncture the bag. Care should be taken to ensure the outside of the container and the bag remains free from contamination with blood and other body fluids. The request form must be completed fully. This includes the patient identifier, the test required and relevant clinical details. Specimens to be sent by post must be in an approved Post Office container surrounded by absorbent material. The specimen must be sent by first class post.

Last offices for a resident with an infectious disease

The precautions used during life for residents with an infectious disease remain necessary after the person's death. The body of a person who has had an infectious disease may remain a hazard to those who handle it. In addition, it may be necessary for the body to be placed in a body bag before removal to the undertakers. This information should be communicated to the undertaker without any breach in confidentiality. The undertaker will normally supply a body bag, if it is required.

To minimise the risk of infection, disposable gloves and an apron should be worn by those carrying out the laying-out procedure, whether this is done by staff, the undertaker, or by relatives under supervision.

If a body bag is required before the body is removed to the undertakers, the body should be placed in a shroud, or the person's own clothes, and then in the body bag, which should be carefully secured. The identity labels and 'Notification of Death' labels should be attached in such a way that they may be read through the body bag. Another '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, only the type of precautions required, such as the need to avoid embalming in the case of blood-borne viruses. The undertaker should be informed of the danger of infection but without disclosure of the diagnosis. Once the body is sealed in the body bag, protective clothing will no longer be necessary for those who handle the body.

Relatives who wish to view the body should not be prevented from doing so. Clear advice needs to be given to relatives if infection control precautions are required.

If relatives wish to take the body abroad for a funeral, certificates may be required from the attending doctor to certify that the body is safe for transport. This will normally be organised by the undertakers, in liaison with the doctor. The furniture and any equipment in the resident's room should be cleaned thoroughly using hot water and detergent, unless the local HPU advises that disinfection is required. Body fluid spillages and laundry should be dealt with as described on pages 52-53.

See also 'Controlling the risks of infection at work from human remains A guide for those involved in funeral services (including embalmers) and those involved in exhumation' (Health and Safety Executive, 2005).

3.2 The prevention, management and control of infections

This is general advice on how to prevent the spread of infection if individual cases occur in care home residents. Most of the diseases listed will have been diagnosed by a doctor (usually the resident's GP), who should be the source of advice on treatment of the individual's illness.

Persons in charge of care homes are reminded of the need to keep a record of residents suffering from any infectious disease.

The residents GP has a duty to formally notify the Proper Officer of notifiable diseases listed in **Appendix 2**.

Whenever an outbreak of any infectious disease is suspected within a care home, the person in charge should also contact the local HPU.

Care homes should ensure that they provide suitable and sufficient information on each resident's infection status whenever they are moved from the care of one organisation to another (see **Appendix 3**).

Immunisation of residents

Registered managers need to ensure that residents are up to date with general immunisations, including seasonal influenza vaccination. Some important diseases that may be relevant in a care home setting are highlighted below. For a full and comprehensive guide on all matters relating to vaccine-preventable diseases refer to *Immunisation Against Infectious Disease 2006 – The 'Green Book'* (Department of Health, 2006) www.immunisation.dh.gov.uk/category/the-green-book

Influenza

Annual influenza immunisation is recommended for all those living in care homes or other residential facilities where rapid spread of infection is likely to follow introduction of infection and cause high morbidity and mortality. Immunisation is also recommended for the elderly (i.e. all those over 65 years) and those aged 6 months and over with chronic chest, heart, liver, kidney disease, diabetes or those who are immunosuppressed as a result of disease or treatment.

Pneumococcal infections

A single dose of pneumococcal vaccine is recommended for all those aged 65 years and over and those under 65 years of age who are at an increased risk from pneumococcal infection. These medical risk groups include: people who have a heart condition, chronic lung disease, chronic liver disease, diabetes, a weakened immune system and a damaged spleen or no spleen.

Hepatitis **B**

- 1. Individuals receiving regular blood or blood products and their carers;
- 2. People with chronic renal failure;
- 3. People with chronic liver disease; and
- 4. Individuals with learning difficulties in residential accommodation.

Administration of antibiotics

It is important that antibiotics are administered appropriately to ensure successful treatment and reduce the development of bacterial resistance. The GP should be asked to write full and precise instructions on the prescription.

Legislation requires that each medicine should have a printed label containing the following information:

- resident's name;
- date of dispensing;
- name and strength of medicine; and
- dose and frequency to be administered.

Milk and antacids may hamper the absorption of some antibiotics e.g. tetracyclines. The instructions for use should be checked.

Capsules should be swallowed whole. Taking the contents separately or chewing the capsules interferes with absorption of antibiotics by interfering with the timing of their delayed-release mechanisms. If a resident has a problem swallowing the prescribed medication, the GP should be contacted and an alternative formulation prescribed.

When administering liquid formula antibiotics, the bottle should be shaken vigorously before use, so as to mix the contents and deliver a uniform concentration of the drug every time. A medicinal measuring spoon or oral syringe should be used to accurately measure the correct dose; household utensils do not generally hold a true teaspoon (5 ml) or tablespoon (10 ml).

To ensure that the antibiotic is fully effective, many antibiotics have to be given several times each day, at specific times in relation to food. If a dose of antibiotic is missed, it should be administered, as soon as possible, unless it is almost time for the next scheduled dose. If it is nearly time for the next dose, the missed dose should not be administered, and the usual dosing schedule should be resumed. Doses should not be 'doubled' to catch-up. It is important that the resident to which they are prescribed finishes the course of antibiotics and the stop date is added on to their notes.

Adverse effects

Many antibiotics cause mild side effects such as abdominal discomfort and occasional diarrhoea. These are usually transient, resolve without intervention and are no reason to discontinue the treatment. Some residents may, however, develop allergies to specific antibiotics, and may have a reaction to them, that includes skin rashes. The GP should be contacted if the symptoms are severe or persist, especially diarrhoea, which may be attributable to *C. difficile*.

Expiry and storage

All medicines have an expiry date and should be stored away from heat, moisture and direct sunlight. Some antibiotic preparations, particularly liquids, have a very limited shelf-life and some have special storage requirements therefore each item's requirements need checking. The expiry date should be checked before administration and the medicine returned to the supplier, if the expiry date has passed.

Most *but not all* antibiotic suspensions need to be stored in a refrigerator, preferably one that is specifically designated for the storage of drugs (+2°C to +8°C). The temperature of the refrigerator should be monitored and recorded daily, using an appropriate thermometer, and periodic audits of drug storage conditions should be undertaken. Action should be taken to adjust the temperature control if required. Reconstituted antibiotic powders are unstable and have short expiry dates (one or two weeks depending on the specific antibiotic). Partially used or leftover suspensions or syrups of antibiotics should not be used as they tend to deteriorate on storage.

Isolation of residents with an infection

Advice can be sought by the person in charge of the home from the local CIPCP or local HPU.

Isolation of residents with an infection may be necessary to prevent further cases of infection. Ideally single rooms should be available for this purpose and registered managers of homes will need to consider how best to achieve this. In most cases residents can be isolated in their bedroom. Single rooms should contain hand hygiene facilities including liquid-soap dispenser and disposable paper towels. Alcohol hand rub should be available. Ideally, these rooms should have full en-suite, facilities including a toilet. Where this is not possible, residents with infectious diarrhoea should have sole use of a toilet or a commode, which should be thoroughly cleaned after each use. (See Appendix 2 for further information).

Care of persons requiring isolation

It is important to remember that the resident in isolation will be both physically and psychologically isolated. When a decision about isolating an infected resident is taken, it is important to consider the likely effect on the resident. Older people may become disorientated and confused by isolation.

The local HPU/ CIPCP may advise on the management of individual cases where required. Verbal and written information should be given to both the resident and visitors; the local HPU/CIPCP may have leaflets explaining individual infections which the home can use. The information should include the details and reason for the isolation, the likely duration, precautions required and the ways in which the resident's psychological and physical needs will be met, e.g. availability of telephone, newspapers and visiting times.

Planning of a resident's care should take into account the extra time required for isolation procedures, i.e. putting on and taking off personal protective clothing, psychological support and extra time to take in food and drinks. Isolation precautions can be implemented for a resident in their own room.

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Diarrhoea and vomiting

Diarrhoea in older people is common and is not always caused by an infection. A baseline of usual bowel habits should be established with the resident in order to provide an appropriate bowel care plan. Other possible causes are over-prescription of laxatives, change in diet and underlying bowel disease. Nevertheless, all cases should be taken seriously and presumed to be infectious until advised otherwise.

The resident's GP should be notified. If infection is suspected, the GP may arrange for specimens to be sent to the laboratory. This is particularly important if the diarrhoea follows a course of antibiotic treatment in case the resident has developed an infection with *Clostridium difficile*.

If more than two cases, suspected or known to be infectious, occur within a few days, the local HPU should be notified.

Residents who are vomiting should be kept in a single room, as long as symptoms persist. Most acute diarrhoeal infection is caused by viruses, for example, norovirus also know as the 'winter vomiting disease' due to its seasonality and typical symptoms. It is often short-lived, but the symptoms and their effect on older people can be severe. There is often little warning of the vomiting and, the environment may become heavily contaminated and the infection will spread rapidly to other residents and staff.

It is, therefore, important that infected residents are isolated and infected staff excluded from work, until 48 hours after the symptoms have settled. Management of cases should be planned following a risk assessment, which should consider continence, personal hygiene, overall health, likelihood of physical contact with other residents or their food, the facilities available and the vulnerability of other residents. The local HPU can advise on this process. Infected residents should, if possible, have sole use of a designated toilet or commode as long as their symptoms persist. In the case of a likely norovirus infection, they should keep a designated toilet facility for 48 hours after their symptoms have settled.

It is important that an enhanced cleaning regime, using a bleach-based product used at the correct concentration and rinsed well, is carried out on the environment and equipment (Note: bleach should not be used on soft furnishings). Clean disposable cloths and washable mops should be used to clean frequently hand touched hard surfaces and should occur at least twicedaily during an outbreak. Particular focus should be on toilet seats, door/toilet handles and sink taps.

Hand washing with liquid soap and water is vital to minimise the spread of infection and should be actively promoted. Care staff should be able to access liquid soap and disposable paper towels easily. Alcohol handrub is not effective at deactivating the viruses and bacteria that cause diarrhoeal outbreaks.

The HPU will advise on any special measures required by an outbreak.

If food-borne infection is suspected, the local HPU and EHP should be contacted. They will advise whether samples of food should be retained and/or specimens from residents for investigation. Sudden onset of illness and a steep increase in the number of residents and/or staff affected over a 24–48 hour period may suggest a food-borne problem.

Consideration should be given to the safety of visitors of residents with infections, particularly if the visitors are older people or the very young.

Information should be prepared for visitors which should ask them not to visit if they have had symptoms of diarrhoea or vomiting within the previous 48 hours.

Most residents with diarrhoea or vomiting can be cared for in the home environment, as the symptoms are likely to subside within 48 hours. In the event of hospital assessment / admission being necessary, the receiving hospital should be notified about the possibility of infection before the resident arrives, so that appropriate precautions can be put in place to prevent infection spread. The transporting ambulance staff should also be notified.

If a resident is discharged from hospital within 48 hours of the last symptoms of diarrhoea and vomiting, every effort should be made to care for them in a single room with a dedicated toilet and appropriate precautions until they have been clear of symptoms for 48 hours.

Clostridium difficile infection

Clostridium difficile (*C. difficile*) or "C. diff", as it is often referred to, is a major cause of antibiotic-associated diarrhoea and colitis (inflammation of the intestines).

C. difficile is a bacterium that can be found in the large intestine (gut) of adults. It is usually kept in check by the normal bacteria flora found in the intestine. For many it poses no threat, but certain antibiotics given to individuals may disturb this balance and allow the *C. difficile* to multiply in the intestine and produce toxins. The toxins may damage the lining of the intestine which can result in symptoms ranging from mild diarrhoea to profuse watery diarrhoea becoming progressively more severe accompanied by fever, vomiting or abdominal cramps to severe life-threatening colitis.

Individuals who have been treated with broad-spectrum antibiotics are at greatest risk of *C. difficile* disease. Infections occur mainly in individuals in hospitals and care homes particularly elderly people with other underlying conditions.

In many cases the disease develops after cross infection from another infected individual, either through direct person-to-person contact, via care staff, or via a contaminated environment. An individual who has diarrhoea caused by *C. difficile*, will excrete large numbers of spores in their faeces. The

general environment including surrounding furnishings, equipment, toilet facilities, commodes, etc is very likely to become contaminated with the spores. The spores may survive for a long period of time in the environment, therefore, increasing the risk of cross-infection.

The registered provider or manager is responsible for reporting to the local HPU if more than two or more cases of diarrhoea, suspected or known to be infectious, occur within a few days.

Infection prevention and control measures include standard infection control precautions, specifically:

- hand hygiene using liquid soap and hot water. Staff should be reminded not to use or rely on alcohol handrub as this does not kill *C. difficile*;
- good infection prevention and control practice at all times;
- isolation of individuals with confirmed or suspected *C. difficile* diarrhoea;
- the wearing of gloves and aprons when caring for the individual, especially when handling bed pans, faeces and assisting with toileting and hygiene needs;
- keeping the environment clean at all times with an enhanced cleaning schedule for toilet facilities. A chlorine-based disinfectant agent should be used as part of the cleaning protocol to reduce the risk of spores surviving in the environment; and
- prudent antibiotic prescribing, in line with local prescribing policy, to reduce the use of broad-spectrum antibiotics so that the natural protection of an individual is not weakened.

Respiratory infections

Respiratory infections are very common and may be serious in older or debilitated people. They may be viral or bacterial in origin. The risk of respiratory infections can be reduced by annual influenza vaccination of residents of aged 65 or older and younger residents with serious underlying health problems. Influenza immunisation for care staff can also reduce the likelihood of an influenza outbreak occurring. Residents over 65 years and others in the at risk category should also receive a pneumococcal vaccine.

Most respiratory infections are spread through the air as well as through close contact, so the residents should be nursed in a single room during the acute illness, particularly if they are coughing and sneezing. Residents, staff and visitors should be encouraged to minimise transmission of respiratory infections through the following good hygiene measures:

- Cover nose and mouth with disposable single-use tissues when sneezing, coughing or wiping and blowing noses.
- Dispose of used tissues promptly into the nearest waste bin and empty into the clinical waste bin.
- Wash hands after coughing, sneezing, using tissues or contact with respiratory secretions and contaminated objects.
- Keep hands away from the eyes, nose and mouth.
- Assist those residents who may need assistance with containment of respiratory secretions; those who are immobile will need a receptacle (such as a paper bag) readily at hand for immediate disposal of tissues and a supply of hand wipes and tissues.

The GP may arrange for sputum specimens to be sent to the laboratory.

If an outbreak of respiratory disease in a residential home is suspected, the local HPU should be contacted. They may arrange for the collection of further specimens, and suggest the use of antiviral medication if indicated.

Consideration should be given to the safety of visitors to residents with infections, particularly older people and very young visitors.

If residents require admission to hospital during a possible outbreak of respiratory infection, the admitting hospital should be informed of the infection risk before the resident arrives.

Skin infections/infestations

It may be necessary to care for a resident in a single room until treatment of skin infections such as shingles and skin infestations, such as scabies is complete, or during the acute/weeping phase of a skin infection.

The CIPCP can advise on local policies on the treatment of infestation e.g. scabies. They can also advise on how to co-ordinate the treatment of a large group of residents and/or staff and visitors if this is required.

Consideration should be given to the safety of visitors to residents who have an infection, and they should be provided with information about symptoms and treatment.

Visiting care workers (e.g. district nurses or physiotherapists) who have close physical contact with residents should be informed if a resident has a skin infection or infestation.

If a resident with a skin infection, or an active or partially treated infestation, requires admission to hospital, the admitting hospital should be informed of the condition.

Blood-borne virus infections

Residents infected with HIV or hepatitis B or C do not need to be isolated. Standard precautions, including care with sharps disposal, should be strictly observed. Special precautions may need to be observed when the resident has a clinical procedure at the dentist, hospital or podiatrist.

Antibiotic-resistant bacteria

Residents may be transferred from hospital while colonised or infected with a variety of antibiotic-resistant bacteria, including meticillin resistant *Staphylococcus aureus* (MRSA). Often these bacteria will be colonising the

skin or gut, without causing harm to the resident, and will not cause harm to healthy people.

Because colonisation can be very long-term, it is not necessary to isolate residents known to be colonised with antibiotic-resistant bacteria. Good hand hygiene and the use of standard precautions will help minimise the spread of these organisms in a care home environment.

Residents colonised with antibiotic resistant bacteria will not routinely require repeated sampling or treatment to clear their colonisation. The resident's GP, the CIPIC or the local HPU will advise when this is appropriate.

If a resident, previously known to be colonised with antibiotic-resistant bacteria requires admission to hospital, the residents GP should include this information in the referral letter.

People with MRSA do not present a risk to the community at large and should continue their normal lives without restriction. MRSA is not a contra-indication to admission to a home or a reason to exclude an affected person from the life of a home. However, in residential settings where people with post-operative wounds or intravascular devices are cared for, infection control advice should be followed if a person with MRSA is to be admitted or has been identified amongst residents.

Residents will need to be screened for MRSA colonisation on admission to hospital. The hospital or resident's GP will advise on this and any subsequent treatment required.

See page 39 for administration of antibiotics.

3.3 Environmental aspects of infection prevention and control

Introduction

Good infection prevention and control are essential to ensure that people who use health and social care services receive clean safe care and must be a part of everyday practice and applied consistently by everyone.

Achieving and maintaining high standards of cleanliness in care homes is important for three reasons:

- it is what residents and their families expect and deserve;
- it contributes to ensuring a safe environment for care; and
- it is a mandatory requirement to support continued registration with the Care Quality Commission.

Cleaning of the environment

Premises and facilities should be provided with cleaning policies and materials in accordance with best practice guidance. The development of local cleaning policies should take account of infection prevention and control advice given by the relevant expert and should address the following.

General cleaning

Care homes should be cleaned and kept clean to the highest possible standards. Care providers should be aware that standards of cleanliness are seen as an outward and visible sign of the overall quality of care provided.

Since April 2010 (and in order to maintain registration with the Care Quality Commission) regulated providers of health and social care have had to comply with the requirement to 'Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections'. The Code of Practice outlines the key elements a registered provider needs to consider. Ultimately, it is for individual care providers to determine precisely how they will meet this requirement, although there are underlying principles that should be met at all times. These include, but are not limited to, the need to have clear arrangements for:

- the assessment of infection risk;
- clear individual responsibilities for cleaning;
- policies on how to clean all areas of the environment, fixtures and fittings; and
- what products to use.

Where cleaning services are provided by private contractors, cleaning plans should also set out management arrangements to ensure the provider delivers against the contract. Contracting-out the cleaning service does not mean contracting-out responsibility, and registered managers will need to ensure that there are suitable arrangements in place to monitor standards and to deal with poor or unsatisfactory performance.

A range of advice and guidance has been provided to the NHS in the area of cleanliness, both in terms of providing services and in monitoring standards, the following source documents will be of particular interest.

National specifications for cleanliness: care homes

This version of the specifications was developed specifically for the care home environment. It was developed with the principles of 'proportionality' very much in mind, in recognition that care homes aim to provide a place where people feel at home. Furthermore, in some cases, the specific aim will be to support people to be independent in a homely environment and to have a choice over their daily lives. Arrangements to keep the environment clean must therefore take this into account.

The specifications aim to provide a toolkit for care home owners and managers. They set out in clear and simple terms the standard expected across a range of 'elements', which taken together cover all the important aspects of cleanliness encountered in keeping premises, equipment to fixtures and fittings clean. In addition, it provides a simple auditing/monitoring process, which allows care providers to check on performance against agreed standards. The specifications can be found at: www.nrls.npsa.nhs.uk/resources/?EntryId45=75240

Revised Healthcare Cleaning Manual

The revised manual is a detailed, easy-to-follow, step-by-step document demonstrating the correct way to clean and gives details of cleaning materials and equipment (and maintenance of equipment) needed to help achieve the highest possible standards of cleanliness. It includes sections that cover the prevention and control of infection, health and safety, risk assessment and training. It provides detailed methods for general cleaning (furniture, fixtures and fittings and walls), floors, kitchens, washrooms and sanitary areas. There is also advice covering specialist areas (including cleaning of isolation rooms) and equipment.

When read in conjunction with the National Specifications for cleanliness, this guidance can help health and social care providers identify standards of cleanliness and what systems and processes they need to put in place to deliver and monitor those standards.

The manual can be found at: www.nrls.npsa.nhs.uk/resources/?EntryId45=61830

Minimum cleaning frequencies

Having clearly defined cleaning tasks, it is crucial to ensure that they are carried out at the required frequency. This will also help to determine precisely what cleaning resource is needed. Cleaning frequency charts should be available on request. An example of a minimum cleaning frequency schedule is contained within the *National Specifications for Cleanliness.*

Colour coding

Ensuring the risks from cross-contamination through inappropriate cleaning practices are kept to a minimum will be assisted by a clear system for the colour coding of cleaning equipment. In January 2007, the National Patient Safety Agency issued a standard colour code for cleaning materials and this is suitable for adoption by care homes.

Disinfectants

Warm water and neutral detergent is suitable for many cleaning activities, and disinfectants should not be used routinely as a cleaning agent and should not be used for the storage of equipment (e.g. mops). Disinfectants should only be used on advice from the local infection prevention and control team and may be used during outbreaks of infection. They should only be used at the recommended dilution after the removal of any visible dirt and stored and discarded in accordance with the manufacturers' instructions.

Managing spillages of blood or other body fluids

Managing spillages of blood or other body fluids

Blood and body fluids may contain a high concentration of micro-organisms, which should be made safe immediately after the spillage has occurred. Clearing blood or body fluid spillages may expose the care worker to the risk of infection and every care should be taken to ensure the member of staff is protected by the appropriate use of personal protective clothing (see **Appendix 6**).

The care home should have equipment available for use in clearing spills, including a chlorine releasing agent (10,000 ppm of available chlorine), on hard surfaces and floors and staff should be trained in its use and in the proper management of blood and body fluid spillages.

Chlorine releasing agent must be stored in a locked cupboard. It is not necessary to have a commercially available spillage kit, as long as the

component parts are readily accessible i.e. gloves, aprons, a chlorine releasing agent, paper towels and waste bags.

If the incident involves a spillage of blood on soft furnishings and carpets these should be taken out of use and steam cleaned.

Cleaning/decontamination of reusable equipment

Decontamination can be achieved by a number of methods, which fall into the following three categories:

- cleaning physically removes contamination but does not necessarily destroy micro-organisms. It removes micro-organisms and the organic matter on which they thrive. Cleaning with warm water and neutral detergent is a necessary prerequisite to effective disinfection or sterilization. This will be the most common choice of decontamination method within the care home setting.
- disinfection reduces the number of viable micro-organisms but may not necessarily inactivate some microbial agents, such as certain viruses and bacterial spores.
- sterilisation renders an object free from viable micro-organisms including viruses and bacterial spores.

The choice of decontamination method depends on the risk of infection to the person coming into contact with equipment or medical device. To determine the appropriate method of decontamination, it is necessary to carry out a risk assessment for every medical device that is used. Broadly these can be divided into three categories (high, medium and low risk).

Table 2

Level of risk	Description	Method of decontamination	Examples
High risk	Include all reusable medical devices that are used in close contact with a break in the resident's skin or mucous membranes and devices that enter a sterile body area of the resident.	They need to be sterilized if reusable, but single-use items are preferred.	Surgical instruments, syringes, needles and catheters
Medium risk	Items which come into contact with mucous membranes or items contaminated with particularly virulent or readily transmittable organisms, and times that are intended for use on immunocompromised residents.	The appropriate method of decontamination is cleaning followed by disinfection (or sterilisation).	Respiratory equipment and thermometers
Low risk	Items that come into contact with intact skin or does not come into contact with the resident.	For many of these items cleaning is sufficient. However, disinfection may be necessary if there is a known infection risk. See Table 3 for recommended decontamination methods.	Washing bowls, bedding, baths, furniture, toilet seats, floors, walls and sinks.

Only reprocess reusable medical devices. Never reprocess medical devices designed for single-use only.

Normal domestic cleaning with warm water, a detergent and thorough drying is suitable for most items in a care home.

If items of equipment are contaminated with blood or body fluids, clean them thoroughly with warm water and neutral detergent to remove the visible soiling and then wipe with a freshly prepared solution of a chorine-releasing agent with a concentration of 10,000 ppm of available chlorine.

DESCRIPTION OF	REQUIREMENT
I I EM	
Baths	After each use, clean with warm water and detergent
Dadding	And dry
bedding	minutes. For boot consistive fabrics upo a low
	temperature week at 40°C and tumble dry at a minimum
	of 60°C. See section on loundering pages 50.61
	Linen should be changed at frequent intervals and when
	soiled.
Bedpans and urinals	Dispose of single-use items in a macerator. If reusable,
	heat disinfection in bedpan washer-disinfector (e.g.
	80°C for 1 minute). Store dry.
Bowls (washing)	Each resident should have their own washing bowl.
	Clean with warm water and detergent after use. Rinse
	and dry. Store separately and inverted to avoid
	contamination.
Catheter stands	Residents should be allocated their own urinary catheter
	stand which should be cleaned frequently.
Combs and	Each resident should have their own comb or hair brush.
hairbrushes	These should have hair removed and be washed
	frequently.
Commodes	Clean with warm water and detergent and dry after each
	use. During outbreaks of infection commodes should be
	allocated to a single resident and should be
	decontaminated regularly with 1000ppm chlorine
	releasing agent.
Curtains (window)	Care homes should have a programme in place to
	ensure laundering or cleaning takes place at least
	annually.
	Curtains may also need to be cleaned / changed
	following an outbreak of infection and when there is a
	change of resident in the room.
Flower vases	Change water frequently Wash vase in hot water and
	detergent after use and store dry.
Hoist	Surface clean the hoist frame. Examine material and
	clips for wear or damage before each use. Slings should
	be laundered in hottest wash cycle allowable according
	to the manufacturers' instructions and not shared
	between residents.

Table 3: Recommended decontamination methods

Glucose-monitoring	See page 34.
equipment	
Mattresses and covers	Clean covers frequently and before use by new
	residents. Rinse thoroughly and dry. Mattresses should
	be enclosed in a waterproof cover and routinely
	inspected for damage Mattresses should be discarded if
	fluids have penetrated into the fabric.
Nail clippers	Residents should have their own nail clippers which
	should be cleaned after use.
Nebulisers	Do not share between residents. Clean all parts
	thoroughly with detergent and warm water between each
	use. Ensure all parts are thoroughly dried. Refill with
	sterile water only.
Scissors	Clean with warm water and detergent and dry following
	each use.
Shavers	Each resident should have their own.
Splints and walking	Clean with warm water and detergent and dry.
frames	
Stethoscopes	Wipe earpiece and bell with 70% alcohol following each
	use.
Thermometers	Use single use disposable or use a single-use sleeve
(electronic, oral, rectal)	each time and wipe with 70% alcohol after removal.
Towels	Each resident should have their own and laundered as
	for bed linen.
Trolleys, tables	Clean with warm water and detergent and dry.
Wheelchairs	Clean with warm water and detergent and dry weekly or
	when soiled.

If sterilisation of reusable medical devices is required, it should be sourced from an accredited Sterile Services Department, or single-use disposable instruments should be used.

Some medical devices may be difficult to decontaminate and single use devices may be preferable. It is advisable, prior to purchasing equipment, to assess carefully that the recommended decontamination methods are practical, safe and reliable. As assessment will also need to be made whether the equipment can withstand disinfection with a chlorine releasing agent should it be required.

Single-use medical devices

Any device designated as single use only should never be reused under any circumstances and should be disposed of safely once used. The symbol on the right indicates 'do not reuse' and may replace any wording.



Food safety

Legislation

Owners/persons in charge and catering managers should be aware of legislation relevant to food and other services within a care home and should be registered as food businesses by the Local Authority Environmental Health department, which will advise on food safety requirements. In enforcing the legislation, EHPs are entitled to inspect catering facilities in care homes: the emphasis will be on risk prevention and the provision of advice.

The food safety management procedures in place need to be proportionate to the business activity and should include more effective controls where consumers are more vulnerable, as is likely to be the case in care homes.

The Food Standards Agency (FSA) has developed a range of tools including Hazards Analysis and Critical Control Point (HACCP) to assist food businesses in complying with this requirement and these can be found on the FSA website (www.food.gov.uk). Whatever procedures are chosen, it is a requirement of the legislation that they are documented and should demonstrate how the business ensures that the food it produces is safe to eat. Further information on the new legislation and its impact on food businesses on the FSA website,

A food safety management pack, *Safer Food, Better Business* (SFBB), can also be found on the FSA's website at www.food.gov.uk/catering/sfbb. This has been developed to help small catering businesses, such as restaurants and cafés, comply with the regulations and implement food safety control systems. As residents in care homes are a vulnerable group, additional supplementary advice covering protecting food, gift food and minikitchens, has been developed and is available at: www.food.gov.uk/multimedia/pdfs/sfbbcarehomes.pdf

Staff training

All staff engaged in food preparation or handling should have a basic knowledge of food hygiene practices according to their level of work. They should be supervised and instructed and/or trained to a level sufficient to enable them to prepare food safely.

Work exclusion/restriction

The decision to exclude any food handler should be based on individual risk assessment. Food workers must report symptoms of diarrhoea and/or vomiting to their supervisor immediately. No food handler with gastroenteritis should work until they have been free of symptoms for 48 hours, this includes those who carry food and assist with feeding. The HPU or EHP can provide advise on this.

High-risk foods

Certain foods will present more of a risk of food-borne illness to care home residents than others. These foods include meat, poultry, fish, eggs and milk and products made from the latter. If these foods are incorrectly handled, prepared and stored, certain bacteria, which may be present or have contaminated them, may multiply and/or produce toxins to levels that are likely to cause illness. The danger of food-borne illness will be reduced with the proper implementation of a system of identifying and controlling food safety risks and the appropriate training of food-handling staff.

Gifts of food

Visitors frequently bring food in to the care home for residents. It is preferable for this food to be of a low risk nature, such as fruit, biscuits, chocolates and pre-packaged fruit drinks.

Visitors should be discouraged from bringing foods that are required to be kept hot. If chilled food is brought in, it should be transported to the care home

in a chilled container and labelled with the resident's name and the date. Such food should be placed in a refrigerator which is maintained at a temperature of +4°C to +8°C (and used only for this purpose); if food is not consumed within 24 hours, it should be disposed of safely. Registered Managers should ensure that residents and visitors are aware of this policy.

Linen and laundry

The Choice Framework for local Policy and Procedures 01-04 – decontamination of linen for health and social care: Social care manual (2012) contains practical advice to help those working in the adult social care setting. This publication can be found on Space for Health (www.spaceforhealth.nhs.uk).

The guidance is designed help social care professionals to procure and deliver the level of linen decontamination that service-users have a right to expect. The provider's linen handling and laundry policy needs to ensure that service-users' dignity is upheld and that it promotes their care and well-being, while being sensitive to their gender, religion and beliefs.

Linen to be provided and used by care providers:

- should be fit-for-purpose;
- should look clean;
- should be the right material;
- should be the correct type of linen for the intended purpose; and
- should not be damaged or discoloured.

The provision of clean linen is a fundamental requirement of care. Incorrect handling, linen processing and storage of linen can pose an infection hazard. Infection can be transferred between contaminated and uncontaminated items of linen and the environments in which they are stored. Within the care home, specific hygiene measures should be taken to reduce these risks, including:

- correct handling of linen to prevent the spread of infection;
- appropriate decontamination of linen.

Some small care homes for people who have a learning disability or have mental health needs provide linen processing services that are similar to normal domestic arrangements.

Good practice for linen and laundry

Infection can be transferred between contaminated and uncontaminated items of clothing, laundry and the environments in which they are stored. Within the care home, specific hygiene measures should be taken to reduce these risks, including:

- correct handling of laundry to prevent the spread of infection;
- appropriate decontamination of the laundry.
- Appropriate personal protective equipment (including appropriate clothing and eye protection) should be available for all staff.
- Laundered items should be stored in a clean area, above floor level and not be kept in the laundry area.
- The laundry area should be designed to minimise the risk of recontamination of linen and to ensure the protection of residents and staff involved in the handling of used linen. This should include:
 - Procedural segregation of clean and dirty items/areas within the laundry room;
 - Hand hygiene facilities, including a hand wash basin with lever taps and no plug or overflow, liquid soap and disposable paper towels, a pedal-operated clinical and domestic waste bin and a first aid kit;
 - Under no circumstances should a manual sluice facility or sluicing basin be used or situated in the laundry room.
- There should be a designated, separate laundry area used for that purpose only and a workflow system so that clean and soiled/fouled linen are physically separated throughout the process.

Handling dirty linen

All dirty linen should be handled with care and attention paid to the potential spread of infection. Personal protective equipment (PPE) such as plastic aprons and suitable gloves should be worn for handling dirty or contaminated clothing and linen. Linen should be removed from a resident's bed with care, and placed in an appropriate container according to the segregation category. Personal clothing should also be removed with care and placed in the bag, not placed upon the floor. Linen and other dirty laundry should not be held close to the chest to prevent contamination of the uniform (a plastic apron should be worn). Any segregation required prior to washing should be carried out before transport to the laundry area, avoiding the need for additional handling within the laundry. Staff should never empty bags of linen onto the floor to sort the linen into categories – this presents an unnecessary risk of infection. Many care homes currently use water-soluble bags within cotton sacks in a wheeled trolley to facilitate this separation, keeping linen off the floor before taking the bags to the laundry.

After handling linen, hands should be properly washed.

If linen is sent to an off-site laundry, the laundry should be made aware of its nature and written guidelines should be agreed and followed regarding its transportation and handling. The care home manager and laundry staff should be satisfied that the laundering of items sent will meet decontamination guidelines set out in CFPP 01-04 *Choice Framework for local Policy and Procedures 01-04 – Decontamination of linen for health and social care: Social care* manual (www.spaceforhealth.nhs.uk/articles/guidance-summary).

Categorisation and segregation of linen

In an on-site care home setting, two categories should be used relating to the process and these can be colour coded as follows:

• Standard Process – Off White or White. Soiled and fouled items should be placed into a water-soluble bag(s) (and additionally within a white cotton

sack if required) or alternatively placed directly in a white impermeable bag. Heavily soiled items should have any solids removed prior to being placed into the bag. In larger premises, patients' clothing may sometimes be bagged separately to bed linen.

 Enhanced Process – Red. These items should be sealed in a red watersoluble bag immediately on removal from the bed. This primary container should then be placed in an impermeable or nylon/polyester bag. The enhanced process is defined in sections 2.1 and 2.5. Additionally the outer bag must carry a bold legend stating 'INFECTIOUS LINEN'.

All linen/clothing should enter the laundry through the appropriate dirty entrance, and should not be stored but processed as soon as possible.

The laundry staff should never open any inner water-soluble bags. Instead, the bags should be transferred to the washing machine for decontamination.

Washing machines should not be overloaded.

Heavily soiled items should also have a pre-wash/sluice cycle selected.

The washing process should have a disinfection cycle in which the temperature of the load is either maintained at 65°C for not less than ten minutes or 71°C for not less than three minutes when thermal disinfection is used. Alternative time–temperature relationships may be used as long as the efficacy of the process chosen is equal to or exceeds that of the 65° or 71°C processes.

Heat-labile items should be washed at the highest temperature possible for the item.

All items should then enter a drying process (when the item is compatible). Once removed they should be stored in a clean area, above floor level and not be kept in the laundry area.

Pest control

Kitchens and food stores provide ideal conditions for pests. Pests contaminate and spoil food; rodents damage the fabric of buildings from the woodwork to electric cables. Control measures should include the following:

- a named member of staff should take on the role of pest monitoring officer and liaise with an environmental health officer from the local authority or a reputable commercial pest control company;
- stop pests entering with well-fitting doors, covered drains, fly screens or bird-netting;
- look out for evidence of the presence of pests droppings, nests, chewmarks on wood or cables (in the case of rodents); or, for insects, droppings, egg cases, vomit marks, damaged food containers, webbing caused by moths or the presence of the live insects themselves;
- discard any foodstuffs or other articles affected by pests, including milk from bottle tops that have been pecked by birds;
- clean up any spillages 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;
- produce and make available a pest control policy;
- consider the use of a properly installed electric, flying-insect killer; and
- use plastic wheelie bins for all waste as these can be easily cleaned.

Pets

Pets can often enhance the quality of life for care home residents. However, there may be concerns that a resident may catch an infection from a pet, especially if the resident's immunity is reduced through age, illness or therapy. Sensible precautions will reduce this risk to an acceptable level.

The Registered Manager should ensure that a knowledgeable person is responsible for the animal. There should be a written agreement within the establishment to ensure full understanding of:

 the types of animals allowed for the purposes of 'pet therapy' – only mature, house-trained pets are acceptable;

- the control and permitted behaviour of pets while on the premises;
- the routes for entry to and passage through the premises;
- the areas where pets are not allowed (i.e. where food is stored, prepared, cooked or served); and
- any insurance liability of owners and handlers.

Care homes should consider having a local 'Pet Pass' system in place to check that all animals brought into the home are within the following recommended guidelines:

- all animals should be regularly groomed and checked for signs of infection or other illness;
- if pets become ill, diagnosis and treatment by a vet should always be sought and the animal should not be returned to the home until restored to health;
- all animals should have received relevant inoculations;
- all animals should be wormed regularly;
- claws should be kept trimmed to reduce the risk of scratches; any scratches on residents should be promptly and thoroughly cleaned and observed for signs of infection;
- pets should have been exercised before being allowed to meet with residents; and
- all pets, but especially cats and dogs, should have their coats cleaned regularly; bedding should also be cleaned regularly and appropriate insecticides used, as necessary, on the environment and the pet to control fleas; specialist advice should be sought if problems occur.

Care home staff should be familiar with good hygiene practice in relation to pets. These include:

- pets should not be permitted to lick residents;
- after residents and guests have touched animals, they should wash their hands thoroughly;
- pet feeding areas should be kept clean;

- pets should have their own feeding dishes, which should be washed separately from dishes and utensils used for residents and staff;
- pets should not be fed in the kitchen or other food preparation areas; and
- recognised commercial brands of pet food should be used and pet food containers, once opened, should be kept separate from food for human consumption.

Litter boxes should be dealt with as follows:

- they should be cleaned by someone who is healthy and not pregnant;
- a protective apron and gloves should always be worn when litter boxes are being cleaned;
- a disposable liner should be fitted to the box for easy cleaning;
- litter should be changed daily;
- litter should be sealed in a plastic bag and disposed of in accordance with local guidance;
- the box should not be situated near food preparation, storage or eating areas; and
- the box should be disinfected weekly by filling with boiling water which is allowed to stand for at least five minutes, in order to reduce the risk of Toxoplasma infection.

Waste management

Safe handling and disposal of waste

Due to legislative changes that include the Hazardous Waste (England and Wales) Regulations 2005, as amended by the Hazardous Waste (England and Wales) Amendment Regulations 2009, and the Lists of Waste Regulations 2005 (which introduce the European Waste Catalogue Codes), there have been substantial changes in the way that waste is defined. Clinical waste is still defined in the Controlled Waste Regulations 1992; however, as a consequence of the Hazardous Waste Regulations 2005, any waste that is deemed to be infectious or hazardous is considered to be hazardous waste and should be consigned for treatment/disposal at suitably licensed/permitted facilities.

In March 2012, new guidance on the safe management of healthcare waste was published.

The following information about waste disposal is an interim guide. Guidance on local policy can be sought from the local authority, EHP, HPU or primary care provider.

The following information aims to ensure the correct classification, safe and efficient segregation, collection, handling and treatment/disposal of all waste, and in particular clinical waste/hazardous waste.

Responsibilities

The responsibility for the day-to-day management of clinical/hazardous waste rests with the person in charge. All those working in areas where clinical/hazardous and general waste arise should adopt safe working practices, since failure to do so may result in the establishment being in breach of its statutory obligations as regulated by the Environment Agency.

The person in charge has a duty to ensure that all waste is correctly classified, contained and for clinical/hazardous waste, tagged or labelled and stored in a secure place before collection for incineration/ alternative treatment, as appropriate. Collection of waste should be arranged through a licensed waste contractor – using licensed carriers to transport the waste to licensed/permitted treatment/disposal plants only. If in doubt, the Environment Agency can confirm details (see www.environment-agency.gov.uk).

Waste audit

Waste audits are en essential tool in assessing the composition of a waste stream for the purpose of duty of care, adherence to producer pre-acceptance audits for clinical waste. Audits provide useful information on the composition and quantity of waste produced and can play a vital role in demonstrating compliance with regulatory standards.

Waste audits need to be carried out by a nominated person who is responsible for waste management. Trained in the audit procedure they should be fully aware of the risk and hazards posed by the audit protocol. The audit protocol should be stated in the waste management policy.

Audits should address (as a minimum) the effective segregation, packaging, labelling and disposal of waste.

	Application					
Type of audit	Sharps boxes	Infectious waste	Cytotoxic/ cytostatic substances	Waste medicines	Offensive/ Hygiene waste	
Audit observation and recording of practice	Y	Y	Y	Y	Y	
Observation of waste receptacles	Y	Y	Y	Y	Y	
Staff questionnaire	Y	Y	Y	Y	Y	
Detailed examination of waste	N	(Y)	N	Y	(Y)	
 (Y) – Where it can be practicably achieved with an appropriate risk assessment 						

Table 4: Example of waste audit protocol
Staff training

Management has the responsibility for ensuring that all staff and volunteers are trained by a person with experience in training and familiar with the risks, practices and legal requirements of healthcare waste management. Records should be kept and maintained.

Those responsible for training should ensure that staff use appropriate protective clothing and are provided with appropriate waste receptacles and equipment.

Segregation of waste

All clinical waste should be secured in an approved way and identified with a coded tie or label to indicate source of waste (see **Table 5** below). Bags should not be closed by an overhand knot. Good practice is to 'swan neck' the bags by twisting the top and then turning it over on itself. The bag should then be secured with tape and tie. Bags should not be more than ³/₄ full. Areas where clinical/hazardous waste is produced should have foot-operated bins for waste stored in bags.

Plastic waste bags should be constructed of plastic of a gauge appropriate to intended use, to avoid splitting and spillage of contents.

Water authorities now expect that care providers seek authorisation before flushing away disposable bedpan liners, as they are known to block-up pumps and drains. Any discharge of materials to sewers, other than domestic sewage, should have the prior agreement of the statutory responsible body.

Non-clinical waste or domestic waste

Other general waste (food waste, non-contaminated household materials) unsuitable for recycling, should be disposed of in black refuse bags.

The Hazardous Waste (England and Wales) Regulations 2005 do not allow mixing of waste; this includes mis-segregation of domestic-type waste into the clinical or hazardous waste stream.

Bulk storage of waste

Specific areas (stillages) should be designated for waste storage. Storage should be in a well-drained area, with impervious hard standing and wash-down facilities. The area should be kept secure from unauthorised persons. Storage areas should not be accessible to scavenging animals.

Clinical/hazardous waste in orange or yellow bags should be kept separate from general waste in black refuse bags and soiled laundry bags to minimise the risk of accidental cross-contamination. All accidental spillages in the bulk storage areas should be cleaned up immediately.

Table 5: Colour coding of healthcare waste according to infection risk

Colour	Description of item	Requirement
Soft clinical	Clinical waste: infectious	Definition -
wastes		hazardous
	Blood contaminated dressings, disposable gowns,	
(orange	clinical gloves, PPE (contaminated disposable	Disposal –
bag)	gowns and clinical gloves) and swabs and other	alternative
	salvia contaminated items from a known infectious	incineration
	individual or where this medical history is not	memeration
	available).	
	NO medicinally, chemically or amalgam	
	contaminated wastes.	
Sharps	Clinical waste: mixed sharps and pharmaceutical	Definition -
receptacle	waste	hazardous
(vollow lid)	Huppdormia poodlog, ouringoo, and ouringo	Disposal
(yenow nu)	harrols including those contaminated with	incineration
	medicines (not cytotoxic and cytostatic)	Incineration
	Used medicine vials	
	Other sharp instruments or items including teeth	
	without amalgam fillings	
	Offensive/hygiene waste from dental	Definition -
	care, for example saliva-contaminated	offensive/hygi
	items where no known infection risk is present	ene waste
	Gowns, gloves, tissues and other items from dental	Disposal-
	care which are not contaminated with blood,	landfill or
	medicines, chemicals or amalgam	municipal
	Municipal offensive/hygiene	incineration
	Hygiono wasto from toilate only	
Municipal	Demostic type refuse:	Definition
waste		non hazardous
	Food packaging	
	 Paper/magazines that cannot be recycled 	Disposal –
	Paper towels	landfill or
		municipal
	(no hazardous wastes)	incineration

Disposal of pharmaceutical products

Unused drugs and other pharmaceutical products should be returned to the pharmacist and in accordance with the care homes pharmaceutical waste disposal guidelines. On removal of the medicines the pharmacist or waste disposal carrier should sign a returns book. They should not be administered to any resident other than the person for whom they were dispensed.

Water for drinking and non-drinking purposes

Water for drinking

The provision of clear, palatable and safe drinking water is fundamental to the protection of public health. Water from the "mains" is treated to high standards and should be assumed, unless homes are expressly notified otherwise, to be safe to drink at the point of delivery. The importance of a continuous safe water supply to homes is, nevertheless, such that they should enquire about becoming registered by their local water undertakers in the event of a service failure. Advice on the safe use of private water supplies (for example, drawn from a well or borehole) is available from local authorities.

Water coolers and ice-making machines in care premises should be mains fed or supplied from sealed containers and not topped-up. Contamination can be minimised by regular cleaning and maintenance in accordance with the manufacturer's recommendations.

Water for non-drinking purposes

Water is used for a variety of non-drinking purposes in homes but can be a source of a variety of bacteria including the cause of Legionnaires' disease which is usually associated with hot water services and recirculating cooling water systems. *Legionella* bacteria are naturally widespread in water, particularly stagnant water systems where biofilm may build-up and resist decontamination by heat, chlorination and biocides. The route of infection is usually inhalation of contaminated water droplets from ventilation systems, showers and whirlpool spas.

To reduce the risk, water distribution systems should be free of 'dead legs' and 'spurs' and hot water should be stored at 60°C or above, cold water at 25°C or below. A policy should be in place to minimise the risk of legionellosis and scalding. Further guidance on controlling Legionella is available from the Health and Safety Executive. Advice may also be sought from the Local Authority Environmental Health department. For further information see guidance from the HSE '*Controlling legionella in nursing and residential care homes*' (www.hse.gov.uk/pubns/indg253.pdf).

Spa/ therapy pools

Spa pools (also known as hot tubs, whirlpool spa, whirlpools or Jacuzzi[™]) allow people to sit in warm water agitated with air and water jets. The water is not replaced after each use, but is disinfected and recirculated.

It is critical that the spa pool is correctly designed, constructed and installed, and then managed safely to both meet legal standards and reduce the risk of infections.

The use of hydrotherapy pools in the care-setting can on occasion cause chest, ear, skin and gastrointestinal infections. Because of the difficulty in maintaining a safe water quality, pool maintenance is essential and management programmes, which include the treatment of the water, cleaning and disinfection of the system and monitoring the water quality, should be established.

Workwear, uniform and dress code

There is no conclusive evidence that uniforms and workwear play a direct role in spreading infection therefore the clothes that care staff wear should facilitate good practice and minimise any risk to residents.

Residents and the wider public should have complete confidence in the cleanliness and hygiene of their environment. The way care staff dress is an important influence on people's overall perception of the standards of care they experience.

Uniforms should be clean at all times, and professional in appearance. In addition, public attitudes indicate it is good practice for staff either to change at work, or to cover their uniforms as they travel to and from work.

Uniforms and work-wear should not impede effective hand hygiene, Nothing should be worn that could compromise the residents safety or staff safety during care, e.g. false nails, rings, earrings (other than studs) and necklaces. Local policies may allow a plain ring, such as a wedding ring. Policies should also take into account cultural sensitivities with regard to uniform.

Washing uniforms and workwear

All elements of the washing process contribute to the removal of microorganisms on fabric. Detergents (washing powder or liquid) and agitation release any soiling from the clothes, which is then removed by sheer volume of water during rinsing. Temperature also plays a part.

A wash for 10 minutes at 60°C is sufficient to remove almost all microorganisms. Washing with detergent at lower temperatures – down to 30°C eliminates MRSA and most other micro-organisms.

Both infection prevention and control and public confidence should underpin a care home's uniform policy. Examples of good and poor care staff practice in uniform/dress code are shown below.

Table 6: Examples of good and poor practice relating to uniform/dress code

lt	is GOOD practice for care staff to:	It is POOR practice for care staff to:			
•	Wear short-sleeved	•	Go shopping whilst wearing a		
	shirts/blouses when providing		uniform or undertake similar		
	care as cuffs become heavily		activities in public		
	contaminated. Short sleeves also	•	Wear false nails when giving care		
	enable good hand hygiene		directly to an individual as these		
	practice		can harbour micro-organisms and		
•	Protect uniform with a plastic		can reduce compliance with good		
	apron if it is likely to become		hand hygiene		
	contaminated with blood or body	•	Wear hand or wrist		
	fluids		jewellery/wristwatches (a plain		
•	Change into and out of uniform		wedding ring is acceptable) as		
	at work or cover uniform		these can harbour micro-organisms		
	completely when travelling to and		and can reduce compliance with		
	from work		good hand hygiene		
•	Wear clear identifiers (uniform	•	Wear numerous badges or other		
	and/or name badge) as residents		adornments		
	wish to know who is caring for	•	Wear neck-ties (other than bow-		
	them		ties) in any care activity which		
•	Change immediately if uniform or		involves contact with residents		
	clothes become visibly soiled or	•	Carry pens, scissors or other sharp		
	contaminated		or hard objects in outside breast		
•	Tie long hair back off the collar		pockets		
•	Keep fingernails short and clean				
•	Wear soft-soled, closed-toed				
	shoes which offer protection				
	against spills and dropped				
	sharps				
•	Wear clothes that are machine				
	washable				

Annual Statement

This is a suggestion for what topics should be covered in the Annual Statement, which each Care Home is required to produce as part of compliance with the Code of Practice on the prevention and control of infections under the Health and Social Care Act 2008.

The Statement should contain a short review of:

Outbreaks of infection	This should contain a brief summary of any outbreak of an infection such as any multiple cases of diarrhoea and vomiting, norovirus, or <i>Clostridium difficile</i> .
	 The summary should contain: the timescale of the outbreak the number of people affected the duration the precautions taken to manage the outbreak and any lessons learnt and action taken following an outbreak. how the outbreak was communicated both to staff in the home and to families and visitors outside the home.
	The summary should include new cases of infection which were diagnosed after admission to the care home. It should also detail the number of people admitted with infections. A summary of any other notifiable disease within the year should also be summarised.
Audits	 A summary of audits undertaken. This should include: the name of the audit tool; the frequency of the audit; and whether it was an internal audit or one undertaken by an external body. action taken following audits
Risk assessments	Risk assessments undertaken for prevention and control of infection. A summary of the assessment of the risks to persons receiving care with respect to prevention and control of infection.

	 In addition, risk assessments should be undertaken for example: each person who has a catheter; PEG feed; pressure sore; or other factor which makes them more susceptible to the risk of infection. Also any person who has repeatedly been prescribed medication for infections should be identified and a review undertaken to determine how the risk of infection can be minimised in future.
Training	 Training in infection prevention and control received by staff A summary of the numbers of staff who received training the number who received refresher/update training and the numbers who are awaiting training. Details on the nature of the training should be listed along with the source of the training.
Review and update of policies, procedures and guidance	Review and update of policies and procedures This should identify which policies/procedures/guidance were due for review in the period, the changes that were made and the new review date.
Actions taken	Any actions taken following an outbreak of infection or following recommendations from an audit. The specific actions should be stated where changes in practice have been implemented and new learning outcomes should be described where training materials have been updated.
Communication	The statement should provide brief details on how the outbreak was communicated both to staff in the home and to families and visitors outside the home.

List of diseases

Disease or causative	M	ode of transmission	Period of infectivity	Additional Infection control precautions	Notes	Notify local HPU
organism						
Bacillus cereus	•	Food (preformed	Not infectious.	None.	Retain food samples.	Yes
food poisoning		toxin)				
Body lice	•	Person-to-person	Until treated.	If new resident,		No
				single room until		
				treated.		
				Launder resident's		
				clothing and bedding.		
Campylobacter	•	Food	While diarrhoea	Single room if	A local risk assessment should be	Yes, as the
spp.	•	Hand-to- mouth	persists.	incontinent.	undertaken to determine if pets in	infection could
	•	Pet faeces		Separate toilet.	contact with resident need to be	be the result of
					examined by a vet.	food poisoning.
Chickenpox	•	Airborne	Infectious for 1–2 days	Single room.	Pregnant staff and visitors who are not	Yes
(varicella)	•	Contact with rash	before the onset of		immune should avoid contact. Local	
			symptoms and 6 days		HPU will advise on the management of	
			after rash appears or		contacts and may advise	
			until lesions are		immunoglobulin and early antiviral	
			crusted (if longer).		therapy.	

Clostridial food	•	Food	Not infectious.	None.	Toxin formed in gut after ingestion.	Yes
poisoning					Retain food samples.	
(C. perfringens)						
Clostridium	•	Hand-to-mouth	While diarrhoea	Single room.	May need treatment with antibiotics.	Yes- if there is
difficile	•	Environmental	persists.	Separate toilet.	Likely to cause outbreaks.	a risk of cross
		contamination				infection
Cold sore	•	Direct contact with	Until lesions crusted.	Use gloves for		No
(herpes		lesions		handling lesions,		
simplex)				feeding or mouth		
				care.		
Conjunctivitis	•	Direct contact with	Until 48 hours after	Gloves/no touch		If two or more
		the discharge	treatment.	technique when		related cases
				dealing with		are suspected
				discharge. Personal		
				hygiene/hand		
				hygiene.		
Cryptosporidiu	•	Water	While diarrhoea	Single room.		Yes
<i>m</i> spp.	•	Hand-to-mouth	persists.	Separate toilet.		
Escherichia coli	•	Food	Variable, but unlikely to	Single room until 48	Retain food samples.	Yes
including	•	Hand-to-mouth	infect others by 48	hours after diarrhoea	Complications include haemolytic	
verotoxin-			hours after diarrhoea	stops.	uraemic syndrome.	
producing <i>E.</i>			stops unless poor	Separate toilet.	Contact the HPU for advice on contact	
<i>coli</i> (VTEC)			hygiene/		tracing and sampling.	
			Incontinent.			

Fleas	•	From pets Person-to-person	Until treated.	If new resident, single room until treated. Treat pets. Launder resident's clothing and bedding.	Vacuum room of infected person daily for several days, with particular attention to pest resting sites.	No
German measles (rubella)	•	Droplet, direct contact with infectious secretions.	Incubation period of 14–17 days. (range 14 – 21). Individuals are infectious from about one week before, and at least four days after, the onset of the rash.	Single room	Pregnant staff should know their immune status and seek advice if not immune. Non-pregnant staff should be immunised if susceptible.	Yes
Giardia lamblia	•	Water Hand-to-mouth	Until treated	Single room, if incontinent. Separate toilet.		Yes
Head lice	•	Person-to-person	Until treated	Combing egg cases (nits) and live lice from hair.		No

Hepatitis A	•	Hand-to-mouth	The incubation period	Single room.	May be asymptomatic, but can be	Yes
	•	Food	is 15 –50 days,	Separate toilet.	severe and prolonged in older	
			average 28-30 days.	•	people.	
			Maximum infectivity			
			occurs during the latter			
			half of the incubation			
			period and continues			
			until 7 days after			
			jaundice appears.			
Hepatitis B	•	Contact with	Variable, but can be for	Strict application of	Immunisation of some staff may be	Yes – for acute
		infected blood or	life.	standard precautions,	recommended.	infection
		other body fluids		including care with		(jaundice)
	•	Sexual		sharps and body		No – for chronic
		transmission		fluids		carrier state
Hepatitis C	•	Contact with	For one or more weeks	Standard precautions		Yes – for acute
		infected blood or	prior to onset of the	including care with		infection
		other body fluids	first symptoms; may	sharps and body		(jaundice)
			persist in most persons	fluids.		No – for chronic
			indefinitely. May be			carrier state
			infectious for life			
HIV/AIDS	•	Contact with	For life.	Standard	Resident's GP, consultant and the Local	No
		infected blood or		precautions,	HPU will collaborate with management.	
		other body fluids		including care with		
	•	Sexual		sharps (see pages 30		
		transmission		- 31) and body fluids.		

Impetigo	•	Direct contact with	Until crusted over.	Single room until 48	The bacterium may be carried in the	If more than two
(staphylococcal		lesions		hours after treatment	nose of infected resident, other	cases
Or				started	residents or staff	suspected
strentococcal				Cover lesions if		odopoolod
Sheptococcalj				mixing with other		
				residents		
Infactious		Contact with saliva	Variablo - may bo	Caro with articles		No
meccious		Contact with Saliva				NO
mononucleosis			several weeks.	solied with hasai or		
(glandular				throat discharges.		
fever)				Encourage hand		
				hygiene.		
Influenza or	•	Droplet	While symptomatic.	Single room.	See page 38 Immunisation of residents.	If influenza is
influenza-like	•	Direct and indirect		Reinforce the		confirmed by
illness		contact.		importance of		laboratory.
				respiratory and hand		Otherwise if
				hygiene.		more than two
				,,,		cases
						suspected
Measles	•	Airborne, direct	Incubation period is	Single room	Local HPU will advise on the	Yes
		contact with	approximately 10 days		management of contacts.	
		infectious	(range 7 – 18 days)		Pregnant staff should know their	
		secretions.	from exposure to onset		immune status and seek advice if not	
			of fever and, usually,		immune.	
			14 days before the		All staff should have received 2 doses	
			rash appears. The		of MMR or have natural immunity.	

			person is infectious			
			from four days before			
			the rash onset and 4			
			days after rash			
			appearance.			
Mumps	•	Droplet	Incubation period	Single room.	Local HPU will advise on the	Yes
			around 17 days (range		management of contacts. Staff should	
			14 - 25). Greatest		have received 2 doses of MMR.	
			infectivity is from 2			
			days before the onset			
			of symptoms to 4 days			
			after symptoms			
			appear.			
Norovirus	•	Hand-to-mouth	Up to 48 hours after	Single room.	Very likely to cause outbreaks.	Yes
	•	Droplet	symptoms have	Separate toilet.		
			resolved.			
Pinworms,	•	Hand-to-mouth	Until treated.	Personal hygiene,	Vacuum room of infected person daily	If more than two
threadworms				including hand	for several days.	cases
	•	Airborne during bed		hygiene.		suspected
		making				
Pulmonary	•	Airborne if 'open'	Normally 2 weeks after	Single room if	Local HPU will advise on the	Yes
tuberculosis		case (sputum	starting treatment.	sputum smear	management of contacts (residents and	
		smear positive).		positive.	staff).	
		Otherwise not				
		infectious				

Rotavirus	•	Hand-to-mouth	Up to 48 hours after	Single room.	Very likely to cause outbreaks.	Yes
	•	Droplet	symptoms have	Separate toilet.		
			resolved.			
Salmonella spp.	•	Food	Variable, but unlikely to	Single room until 48	Retain food samples.	Yes
	•	Hand-to-mouth	infect others by 48	hours after diarrhoea	Organism can be in stools for weeks/	
			hours after diarrhoea	stops.	months after infection.	
			stops, unless poor	Separate toilet.		
			hygiene/			
			incontinent.			
Scabies	•	Person-to-person	Until treated.	Single room until 24	Untreated or the immune suppressed	If more than two
		(close contact)		hours after treatment	may develop more severe form of	related cases
				Launder resident's	scabies. In this case it may be	suspected
				clothing and bedding	necessary to treat other residents, staff	
					and family members.	
Shigella spp.	•	Hand-to-mouth	Variable, but unlikely to	Single room until 48	Very likely to cause outbreaks.	Yes
	•	Water or food	infect others by 48	hours after diarrhoea	Complications include haemolytic	
		contaminated by	hours after diarrhoea	stops.	uraemic syndrome.	
		infected water	stops unless poor	Separate toilet.		
			hygiene/			
			incontinent.			
Staphylococcal	•	Food (preformed	Not infectious.	None	Retain food samples.	Yes
food poisoning		toxin)			Food contamination from infected	
					fingers, eyes, etc. of food handlers	
					likely.	

Shingles	•	Usually reactivation	Until lesions crusted	A resident with	Staff and residents should not be in	If management
(herpes zoster)		(of chickenpox)		shingles may mix	contact unless immune to chickenpox.	of case poses
	•	Direct contact with		with other residents if		difficulties
		rash		rash can be covered.		
	•	Airborne				
Viral	•	Hand-to-mouth	Variable. May be	Single room.	Very likely to cause outbreaks.	If more than two
gastroenteritis	•	Droplet	several days after	Separate toilet.		cases occur
(undiagnosed)			symptoms resolve			
Whooping	•	Droplet	Five days after start of	Single room	Local HPU will advise on the	Yes
cough			appropriate antibiotic		management of contacts.	
(pertussis)			treatment.			

Папэтст і			
Resident's details:	Consultant:		
Name:	GP:		
Address:	Resident's current location:		
NHS number:	Transferring facility – hospital, ward, care home, other:		
Date of birth:	Contact telephone number:		
Receiving facility – hospital, ward, care home, district nurse	Is this resident an infection risk? <i>Please tick most appropriate box and</i> <i>give confirmed or suspected organism</i>		
Contact telephone number:	Confirmed riskOrganism: Confirmed riskOrganism: Suspected riskOrganism: No known risk		
Is the ambulance /transport service aware of the transfer? Yes/No	Has this resident exposed to others with infection e.g. diarrhoea and vomiting?		
If resident has diarrhoeal illness, please indicate bowel history for last week:			
Other relevant information e.g. specimen	results/treatment :		
Is the resident aware of their diagnosis/ris Yes/No	k of infection?		
Does the resident require isolation? Yes/No			
Should the resident require isolation, please phone the receiving unit in advance.			
Signature of staff member completing form:			
Print name: Contact telephone number:			

Transfer form

Exclusion of staff from work

The following table gives advice on the minimum period of exclusions from work for staff members suffering from infectious disease (cases) or in contact with a case of infection in their own homes (home contacts). Advice on work exclusions can be sought from the care home occupational health advisor or local HPU/HPN/CIPCN.

DISEASE	PERIOD OF INFECTIVITY	PERIOD OF EXCLUSION	
Chickenpox	Infectious for 1–2 days before the onset	Until all vesicles are dry	
	of symptoms and until all vesicles are dry		
Conjunctivitis	Until 48 hours after treatment	Until discharge stops	
Diarrhoea and/or	Depends on causative organism.	Until clinically well and 48	
vomiting		hours without diarrhoea or	
		vomiting.	
Erythema	Four days before until 4 days after onset	Until clinically well	
infectiosum	of rash		
(slapped-cheek			
syndrome)			
Erythrovirus B19			
Gastroenteritis	As long as organism is present in stools,	Until clinically well and 48	
(including	but mainly while diarrhoea lasts	hours without diarrhoea or	
salmonellosis and		vomiting. Local HPU or EHP	
shigellosis)		may advise a longer period	
		of exclusion	
Glandular fever	When symptomatic	Until clinically well	
Giardia lamblia	While diarrhoea is present	Until 48 hours after first	
		normal stool	
Hand, foot and	As long as active ulcers are present	One week or until open	
mouth disease		lesions are healed	
Hepatitis A	The incubation period is 15–50 days,	One week after onset of	
	average 28-30 days. Maximum infectivity	jaundice	
	occurs during the latter half of the		
	incubation period and continues until		
	7days after jaundice appears		
HIV/AIDS	For life	None	
Influenza/influenza	Adults usually infectious for up to five	Until recovered	
type illness	days after symptoms begin, children can		
	be infectious up to 7 days		
Measles	About 10 days (range 7-18 days)	From one day before the	
		beginning of the prodromal	

		period to four days after the	
		appearance of the rash	
Meningitis	Varies with organism	Until clinical recovery	
Mumps	Greatest infectivity from2 days before onset of symptoms to 4 days after symptoms appear	Four days from onset of rash	
Rubella (German measles)	One week before until 4 days after onset of rash	Four days from onset of rash	
Streptococcal	As long as organism is present in throat,	Until clinically improved	
sore throat and	usually up to 48 hours after antibiotic is	(usually 48 hours after	
scarlet fever	started	antibiotic is started)	
Shingles	Until after the last of the lesions are dry	Six days from onset of rash - until all lesions are dry	
Tuberculosis (TB)	Depends on site of infection.	In the case of smear positive pulmonary TB, until cleared by TB clinic. No exclusion necessary in other situations	
Threadworm	As long as eggs present on perianal skin	None but requires treatment	
Typhoid fever	As long as case harbours the organism	Seek advice from Local HPU	
Whooping cough	One week before until 3 weeks after	Until clinically well, but check	
	onset of cough (or 5 days after start of	with Local HPU	
	antibiotic treatment)		
Impetigo	As long as purulent lesions are present	Until skin has healed or 48 hours after treatment started	
Head lice	As long as lice or live eggs are present	Exclude until treated	
Ringworm			
1. Tinea capitis (head)	As long as active lesions are present	Exclusion is not necessary unless an outbreak is suspected	
2. Tinea corporis (body)	As long as active lesions are present	None	
3. Tinea pedis (athlete's foot)	As long as active lesions are present	None	
Scabies	Until mites and eggs have been destroyed	Until day after treatment is given	
Verrucae (plantar	As long as wart is present	None (warts should be	
warts)		covered with waterproof	
		dressing for swimming and	
		barefoot activities)	



Hand washing technique with soap and water

Wash hands when visibly soiled! Otherwise, use hand rub.

Hands should be washed before and after all care procedures, and handling food. Also after dealing with used linen, waste and body fluids or contaminated equipment and after removing gloves.



Wet hands with water;



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



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



Dry hands thoroughly with a single use towel;



Apply enough soap to cover all hand surfaces;



Palm to palm with fingers interlaced;



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



Use towel to turn off faucet;



Rub hands palm to palm;



Backs of fingers to opposing palms with fingers interlocked;



Rinse hands with water;



Your hands are now safe.

Alcohol hand-rub hand hygiene technique for visibly clean hands

Rub hands for hand hygiene! Wash hands when visibly soiled.

Alcohol hand rubs are an effective and rapid means of hand decontamination and should only be used on visibly clean hands.



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



Rub hands palm to palm;



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



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



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



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



Once dry, your hands are safe.

National colour coding for cleaning materials and equipment

National Colour Coding Scheme



Reporting Outbreak: Information for Health Protection Units

Date Completed:					
Reported by (Print Name):					
Name:					
Address:					
Post Code:					
Tel No of Institution:					
E-Mail address:					
Name of Manager/ Contact person:					
SUSPECTED OUTBREAK OF:					
TYPE OF SYMPTOMS AND ANY INFORMATION ABOUT THE SUSPECTED CAUSE OF THE OUTBREAK:					
ACTION TAKEN: (isolation/ exclusion of cases/ enhanced hand washing/ cleaning/ closure to admissions etc):					
INFORMATION: ANY FURTHER ACTION R	EQUIRED:				
INFORMATION REPORTED	DETAILS	SUBMI TO H	TTED PA?		
		YES	NO		
 Number of residents, staff or visitors who are affected. Include number of staff off-sick 					
2. Total number of residents / clients in the home					
3. Total number of staff employed within			1		
the home, including agency and bank					
staff who may have worked shifts during					

the incubation period / outbreak

4.	Date of onset of first symptoms		
5.	Names and date of birth of Case(s) with		
	symptoms involved in the outbreak		
6.	Type of specimens taken and results if		
0.	they are available		
7.	Medical History of residents with		
•••	symptoms (to identify vulnerable		
	people) Including recent hospital		
	admissions and discharges		
8.	Details of any resident admitted to		
	hospital as a result of the outbreak		
9.	Details of any resident / client that has		
	died as a result of the outbreak		
10	Details of vulnerable residents / clients		
	within the care home		
11.	Lavout of the environment: Number		
	single rooms, wings, units, floors within		
	the care home (including names of		
	these)		
12.	Facilities within the Care home: Floor		
	plans, catering arrangements.		
	toilet/bathing facilities.		
13.	Is food cooked on the premises?		
14.	Is any food prepared by external		
	companies?		
	·		
	If Yes: Name of Company?		
15.	Have any residents / staff eaten out or		
	attended social gatherings at other		
	venues?		
16.	Is any food brought in by relatives, staff		
	or visitors?		
17.	Details of vaccination programmes or		
	clinical history will be needed in certain		
	circumstances. This may include both		
	staff and residents (e.g. Flu,		
	pneumococcal MMR, Hepatitis, BCG,		
	Meningitis, Chickenpox)		
18.	Any other information that Care Home		
	feels needs to be included		

Bibliography

Blood-borne viruses

- Expert Advisory Group on AIDS (2004) HIV post-exposure prophylaxis: guidance from the UK Chief Medical Officers' Expert Advisory Group on AIDS www.advisorybodies.doh.gov.uk/eaga/pdfs/pubscheme.pdf
- Expert Advisory Group on AIDS and the Advisory Group on Hepatitis (1998) Guidance for Clinical Health Care Workers: protection against infection with blood-borne viruses. Recommendations of the Expert Advisory Group on AIDS and the Advisory Group on Hepatitis www.dh.gov.uk/assetRoot/04/01/44/74/04014474.pdf

Built environment

 NHS Estates (2002) *Infection control in the built environment*. HFN 30 Department of Health, London, The Stationery Office http://195.92.246.148/knowledge_network/documents/ic_20071219154350.pdf

Clostridium difficile

 Department of Health (2007) *A simple guide to Clostridium difficile*. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndG uidance/DH_4115883

Decontamination

- Medicines and Healthcare products Regulatory Agency (2006) Managing medical devices. DB 2006(05) www.mhra.gov.uk/Publications/Safetyguidance/DeviceBulletins/CON2025142
- Medicines and Healthcare products Regulatory Agency (2006) Single-use Medical Devices: Implications and Consequences of Reuse.DB 2006(04).

www.mhra.gov.uk/Publications/Safetyguidance/DeviceBulletins/CON2024995

 Medicines and Healthcare products Regulatory Agency (2006) Sterilization, disinfection and cleaning of medical equipment: guidance on decontamination from the Microbiology Advisory Committee to Department of Health

www.mhra.gov.uk/Publications/Safetyguidance/Otherdevicesafetyguidance/CON 007438

Environmental cleaning

The national specifications for cleanliness: Guidance on setting and measuring cleanliness outcomes in care homes www.nrls.npsa.nhs.uk/resources/?entryid45=75240
 Revised guidance on contracting for cleaning. This document includes national specifications for cleanliness.
 www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndG uidance/DH_4097532

Essential Steps

Department of Health (2006)

Essential steps to safe, clean care: reducing healthcare-associated infections. The delivery programme to reduce Healthcare associated infections (HCAI) including MRSA. The Stationery Office, London www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndG uidance/DH 4136212

Food safety

Food Standards Agency (2002) Eggs – What Caterers Need to Know. www.food.gov.uk/multimedia/pdfs/eggleaflet.pdf

Food Standards Agency website www.food.gov.uk:

- Regulation (EC) 852/2004 on the hygiene of foodstuffs
- Regulation (EC) 853/2004 laying down specific hygiene rules for food of animal • origin
- Regulation (EC) 854/2004 laying down specific rules for the organisation of • official controls on products of animal origin intended for human consumption
- Hazardous Analysis and Critical Control Point (HACCP) (2005) • Guidelines for the development of national voluntary guides to good hygiene practice and the application of HACCP principles in accordance with EC food hygiene Regulations. June 2005.

www.food.gov.uk/multimedia/pdfs/gpgguidelines.pdf

Glucose monitoring devices

- Medicines and Healthcare products Regulatory Agency Medical Device Alert. Lancing devices used in nursing homes and care homes. 6 December 2006 www.mhra.gov.uk/PrintPreview/PublicationSP/CON2025400 This references a buyers' guide that has been superseded. The current one is NHS PASA Buyer's guide - Lancing systems CEP 07025 - November 2007
- Medicines and Healthcare products Regulatory Agency • Medical Device Alert. Lancing devices (used in pharmacy settings) - all brands. 1 July 2008

www.mhra.gov.uk/Publications/Safetywarnings/MedicalDeviceAlerts/CON020531

Health and safety

- Health and Safety Executive (2011) Controlling legionella in nursing and residential care homes www.hse.gov.uk/pubns/indg253.pdf
- Health and Safety Executive (2008) • Blood-borne viruses in the workplace, Guidance for employers and employees – INDG342. London: HSE www.hse.gov.uk/pubns/indg342.pdf
- Health and Safety Executive (2005) • Controlling the risks of infection at work from human remains. A guide for those involved in funeral services (including embalmers) and those involved in exhumation. www.hse.gov.uk/pubns/web01.pdf
- Health and Safety Executive (2005) COSHH: a brief guide to the Regulations: what you need to know about the Control of Substances Hazardous to Health Regulations 2002 (COSHH). London: HSE. www.hse.gov.uk/pubns/indg136.pdf

- Health and Safety Executive (2003) Health and safety regulation -.a short guide. London: HSE. www.hse.gov.uk/pubns/hsc13.pdf
- Health and Safety Executive (2002) The Control of Substances Hazardous to Health Regulations. Control of substances hazardous to health. Approved codes of practice and guidance. Statutory Instrument No. 2677. www.opsi.gov.uk/si/si2002/20022677.htm
- Health and Safety Executive (2001)
 A guide to measuring health & safety performance. London: HSE www.hse.gov.uk/opsunit/perfmeas.pdf
- Health and Safety Executive (1999) Management of Health and Safety at Work Regulations. Management of health and safety at work. Approved code of practice and guidance. Statutory Instrument No. 3242.

www.opsi.gov.uk/si/si1999/19993242.htm

- Health and Safety Executive (1999) A guide to the reporting of injuries, diseases and dangerous occurrences regulations (RIDDOR) 1995 www.hse.gov.uk/pubns/books/I73.htm
- Health and Safety Executive (1992) *Personal Protective Equipment at Work Regulations.* London: HSE www.hse.gov.uk/pubns/indg174.pdf
- Health and Safety Executive (1974) Health and Safety at Work etc Act www.hse.gov.uk/legislation/hswa.pdf

Immunisation

 Department of Health (2006) Immunisation Against Infectious Disease. The 'Green Book' www.dh.gov.uk/greenbook

Laundry / linen

 Department of Health (2012) Choice framework for local policies and procedures 01-04 Decontamination of linen in health and social care: Social care manual www.spaceforhealth.nhs.uk/England/articles/guidance-summary

Medical device management

 Medicines and Healthcare products Regulatory Agency (2006) DB 2006 (05): *Managing Medical Devices*. London: MHRA. Available from: www.mhra.gov.uk/Publications/Safetyguidance/DeviceBulletins/CON2025142

Medicines management

 Royal Pharmaceutical Society of Great Britain (2007) Handling of Medicines in Social Care www.rpsgb.org.uk/pdfs/handlingmedsocialcare.pdf

Meticillin resistant Staphylococcus aureus (MRSA)

- Coia JE, Duckworth JE, Edwards DI, Farrington M, Fry C, Humphreys H, Mallaghan C, Tucker DR and the Joint Working Party of the British Society for Antimicrobial Chemotherapy, Hospital Infection Society, Infection Control Nurses Association (2006)
 Guidelines for the Control and Prevention of Meticillin-resistant Staphylococcus aureus (MRSA) in healthcare facilities. J Hosp Infect 63.
- Department of Health (2007) A Simple Guide to MRSA.
 www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndG uidance/DH_4113886

Pest control

 Chartered Institute of Environmental Health (2003) The Role of Pest Management in Environmental Health: A Guidance Document for Local Authorities. www.cieh.org/policy/pest_management_EH.html

Prescribing

 Health Protection Agency (2006) Management of Infection Guidance for Primary Care. www.hpa.org.uk/web/HPAwebfile/HPAweb_C/1194947340160

Information on the common conditions managed in non-acute settings can be found at: www.cks.nhs.uk/home (CKS, Clinical Knowledge Summaries (formerly PRODIGY))

Standard infection prevention and control precautions

 NICE (March 2012) *Prevention and control of healthcare-associated infections in primary and community care* www.nice.org.uk/nicemedia/live/13684/58656/58656.pdf

Uniform and workwear

 Department of Health (2010) Uniforms and workwear: Guidance on uniform and workwear policies for NHS employers www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndG uidance/DH_114751 www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/docum ents/digitalasset/dh_114754.pdf

Waste

 Department of Health (2012) Safe management of healthcare waste. Version:2.0:England www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset /dh_133874.pdf

Water

- Health and Safety Executive (1997) Controlling legionella in nursing and residential care homes. www.hse.gov.uk/pubns/indg253.pdf
- Health and Safety Executive (2000) Legionnaires' disease -The Control of legionella bacteria in water systems. www.hse.gov.uk/legionnaires/
- Health Protection Agency/Health and Safety Executive (2006) Management of Spa Pools: Controlling the Risk of Infection. www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1200471665170 ?p=1158945066455
- Health and Safety Executive (2005) Controlling the risks of infection at work from human remains: A guide for those involved in funeral services (including embalmers) and those involved in exhumation.

Other useful resources

British Pest Control Association: www.bpca.org.uk
Department of Health: www.dh.gov.uk
Health Protection Agency: www.hpa.org.uk
National Resource for Infection Control: www.nric.org.uk
National Pest Technicians Association: www.npta.org.uk