

# INFECTION PREVENTION AND CONTROL

Extended guidelines and resource pack for general practice. For use alongside the IPC Core Policy Documents

This guideline has been provided by OCCG as an example of best practice in Infection Control for Primary Care.

It is not mandatory for practices to adopt this guidance and it is accepted that not all primary care facilities have premises which meet these guidelines; in these circumstances mitigation can be put in place using regular audit and feedback cycles, cleaning schedules and staff training.

Consideration should be given to this guidance during refurbishment or building of new clinical rooms.

Practices who wish to adopt the guidance may add their own branding to the document.

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| Date Issued: | August 2016   |
| Reviewed:    | February 2018 |
| Review Date: | January 2020  |

# INFECTION PREVENTION AND CONTROL GUIDELINES AND RESOURCES FOR GENERAL PRACTICES

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## 1. INTRODUCTION

Infection prevention and control is an essential element of high quality care. Having effective infection prevention and control measures in place contributes to the safety of the environment for service users, care workers and others.

These guidelines provide information that will support general practices to put in place the infection prevention and control measures that are required to protect service users and care workers from infection and enable general practitioners to meet the requirements of the Health and Social Care Act 2008 (updated 28<sup>th</sup> July 2015)

The Health and Social Care Act 2008 can be accessed via this link:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/449049/Code\\_of\\_practice\\_280715\\_acc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/449049/Code_of_practice_280715_acc.pdf)

These guidelines should be used in conjunction with the six OCCG Infection Prevention and Control (IPC) core policies for general practice, alongside audit tools found in Appendix 2 and resources which can be found on the OCCG Infection Control page, accessible via the following link:

<http://www.oxfordshireccg.nhs.uk/professional-resources/infection-control.htm>

### 1.1 The Health and Social Care Act 2008 and Code of Practice, updated July 2015

The code applies to NHS bodies and providers of independent healthcare and adult social care in England, including primary dental care, independent sector ambulance providers and primary medical care providers.

The previous Code of Practice document has been updated to reflect the structural changes that took effect in the NHS from 1<sup>st</sup> April 2013 and the role of infection prevention (including cleanliness) in optimising antimicrobial use and reducing antimicrobial resistance.

The law states that the Code must be taken into account by the CQC against the infection prevention requirements, when it makes decisions about registration. The regulations also say that providers must have regard to the Code when deciding how they will comply with registration requirements. So, by following the Code, registered providers will be able to show that they meet the requirements set out in the regulations. It is noted however, the Code is not mandatory. A registered provider may be able to demonstrate that it meets the regulations in a different way (equivalent or better) from that described in this document. The Code aims to exemplify what providers need to do in order to comply with the regulations.

The Code and related guidance sets out how the Care Quality Commission will assess compliance with the registration requirement 'Cleanliness and infection prevention and control' and describes how providers of care may meet the registration requirements related to the prevention and control of infections. There are 10 criteria that providers health care are required to meet:

| <b>Compliance criterion</b> | <b>What the registered provider will need to demonstrate</b>  |
|-----------------------------|---|
| <b>1</b>                    | Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of service users and any risks that their environment and other users may pose to them. |
| <b>2</b>                    | Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.   |
| <b>3</b>                    | Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance.  |
| <b>4</b>                    | Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further support or nursing/ medical care in a timely fashion.  |
| <b>5</b>                    | Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people.                     |
| <b>6</b>                    | Systems to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection.  |
| <b>7</b>                    | Provide or secure adequate isolation facilities.  |
| <b>8</b>                    | Secure adequate access to laboratory support as appropriate.  |
| <b>9</b>                    | Have and adhere to policies, designed for the individual's care and provider organisations that will help to prevent and control infections.  |
| <b>10</b>                   | Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection.   |

All providers of care must comply with other relevant legislation, such as the Health and Safety at Work Act 1974 and the Control of Substances Hazardous to Health Regulations (2002).

Oxfordshire Clinical Commissioning Group have updated these guidelines to aid general practices in compliance with the Code. By following these guidelines and utilising the 6 core policy documents, general practices will ensure that they are taking all reasonable steps to protect service users, care workers and others from acquiring infection.

In developing these guidelines Oxfordshire Clinical Commissioning Group would like to acknowledge the guidelines produced by the Infection Prevention and Control Team of NHS Stoke on Trent in 2010, the South West Health Protection Agency in 2007 and those produced by NHS Highlands in 2008.

Managers and care workers in all sectors of health and social care, whether statutory or voluntary, must be aware of their local infection prevention and control arrangements and whom they can contact for advice, guidance or in the event of an incident. It may be that they employ their own infection prevention and control specialist or team, or may have a contract or informal arrangements with their CCG, hospital team or Health Protection Team.

Health care providers and their managers have a responsibility to ensure all the elements of an infection prevention and control programme with appropriate infrastructures are in place in their own organisation. This is a requirement of The Health and Social Care Act 2008.

The programme should include:

The infection prevention and control measures needed in the service;  
The policies, procedures and guidance that are needed and how they will be kept up to date and how compliance is monitored;  
The initial and ongoing training that care workers will receive.

The infrastructure should:

Be a record of the names and contact details of sources of expert infection prevention and control advice;  
Include guidance for care workers about the circumstances in which contact should be made.

All care workers must have access to a written infection prevention and control policy (see OCCG Core Policy 1) and receive training in infection prevention and control.

The infection prevention and control responsibilities for all care workers should be included in their job descriptions and in personal development plans.

Registered providers will need to report an annual statement/report which provides a review of:

Any outbreaks/incidents of infection and the action taken following these;  
Audits undertaken;  
Risk assessments undertaken for prevention and control of infection;  
Training received by care workers;  
Review and update of policies, procedures and guidance.

In all care settings which deliver healthcare there should be a programme of audit of infection prevention and control practices. Examples of audit tools can be found in Appendix 2 of this guideline.

In case of difficulty or a problem not covered by these guidelines please contact those listed under 'Local Sources of Advice' in Section 2.

## **1.2 Roles and responsibilities**

### **The Registered Provider**

The owner/s of the practice are responsible under health and safety legislation for maintaining an environment which is safe for service users, care workers and others alike. Suitable arrangements and procedures for prevention and control of infection will form part of the health and safety requirements.

### **The Practice Manager**

The practice manager should have access to advice on infection prevention and control from a suitably qualified and competent individual and is responsible for ensuring that there are effective measures in place for the prevention and control of infection which include:

- The provision of up to date policies, procedures and guidelines which are approved by local infection control specialists. These should be readily

available, understood by all members of staff and used within the practice.

- Infection prevention and control training for all staff that is appropriate to their role both at induction and on a regular basis and training records kept. Although there is not one nationally recommended training module Health Education England provide e-learning courses for health care professionals. These can be accessed using this link:
- <https://www.e-lfh.org.uk/programmes/statutory-and-mandatory-training/>
- Monitoring the implementation and effectiveness of infection prevention control policies and procedures should be carried out at least annually by using standardised audit/quality improvement tools.
- Designating an Infection Prevention and Control Lead for the practice.

### **The Director of Infection Prevention and Control (DIPC)**

The DIPC in an organisation providing health care has overall responsibility for infection prevention and control and is accountable to the registered provider of care. This role is usually in NHS providers of health care, such as acute Trusts.

### **The Infection Prevention and Control Lead for the organisation (IPC lead)**

The role of the IPC lead in primary care will depend on the organisational structures and the complexity of the care provided and their role is similar to the DIPC in health care.

Both the DIPC and the IPC lead are responsible for producing an annual report/statement on infection prevention and control which should include:

- information on incidents and outbreaks of infection; risk assessments;
- training and education of staff;
- Infection prevention and control audits;
- actions that have been taken to rectify any problems

### **The Care Quality Commission (CQC)**

The CQC aims to ensure that better care is provided for everyone, whether in hospital, care homes, peoples own homes, or elsewhere. It regulates health and adult social care services, whether provided by the NHS, local authorities, private companies or voluntary organisations. It also protects the rights of people detained under the Mental Health Act.

**Public Health England Centres (PHEC).** The Health Protection Teams lead the Public Health England response to health protection related incidents. The team is comprised of Consultants in Communicable Disease Control (CCDC), Consultants Health Protection (CHP) and Health Protection Practitioners (HPPs and other supporting staff.

Outbreaks and incidents of infection in the community will be monitored and investigated by the team and they will initiate and co-ordinate any necessary action to limit further spread.

### **Consultants in Communicable Disease Control (CCDC) and/or Consultants in Health Protection (CHP)**

The CCDC and the CHPs are employed by Public Health England. CCDC/CHPs are responsible for the control of communicable disease within their locality. They may

advise the local community and infection prevention and control teams on communicable disease control including the management of outbreaks.

They are appointed as the Proper Officer of the Local Authority, which has statutory duties and powers relating to communicable disease control.

### **Health Protection Practitioners (HPP)**

The HPPs are employed by local PHE health protection teams and are able to provide specialist advice on infection prevention and control in the community when outbreaks and other incidents occur. The local health protection team is to be informed of any suspected outbreak of infection in the community and will provide and lead the investigation and management of the outbreak. They should also be informed of any notifiable disease in the area and will advise if it requires further public health management.

### **The Community Infection Prevention and Control Nurse (CIPCN)**

The CIPCN is usually employed by the healthcare trust responsible for community based care, such as community hospitals and mental healthcare providers and provides advice, education, training, policy development and audit functions to the care providers within the community healthcare trust.

### **The infection prevention and control lead for the Commissioning Group**

Employed by the CCG and provides infection control advice to those commissioning services, monitors performance against nationally and locally set infection control limits. Provides infection control advice and support to general practice.

**Hospital Infection Prevention and Control Teams** provide infection prevention and control service for the hospitals. The hospital infection prevention and control teams are comprised of an Infection Prevention and Control Doctor, who is usually a consultant microbiologist, and Infection Prevention and Control Nurses.

### **The General Practitioner (GP)**

The 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 PHE is important in infectious disease control; the GP is responsible for notifying PHE of certain infectious diseases (see section 7.3 Notifiable Diseases).

The GP has a responsibility to prescribe appropriate antibiotics and be mindful of the link between antibiotic prescribing and *Clostridium difficile* infection, for following the local antimicrobial prescribing policy and being aware of advice from the local medicines optimisation team, which includes the OCCG pharmacy advisors.

**Environmental Health Officers (EHOs)** work for local authorities. They advise on food safety and kitchen design, pest control and waste disposal. They are responsible for the control of pollution and other nuisances. Their duties include the inspection of food premises to enforce the requirements of the Food Safety Act 1990. They investigate complaints about food and collaborate with the HPU in the investigation of outbreaks, particularly of food or water-borne illness. They will co-ordinate the collection of samples and delivery to the laboratory during an outbreak to speed the outbreak investigation

**Infection Prevention and Control Link Person** is an employee working in a health care setting and who has received some additional training in infection prevention and control and is appointed by their manager to act as a link between the Infection

Prevention and Control Nurse or Health Protection Nurse and the workplace. A role profile is available in Appendix 1.

### **Practice Staff/Care workers**

Infection prevention and control is the responsibility of everyone working within the practice although the management of this will be shared by the management team and the designated IPC lead. All staff/care workers have a responsibility to ensure that they:

Are aware of the location, how to access and be able to demonstrate an understanding of the practice policies on the prevention and control of infection. Follow the infection prevention and control policies of the practice and to work in such a way that the infection risk to service users, themselves and others is minimised.

Receive infection prevention and control training appropriate to their role.

Report any recurrent skin, soft tissue and other infections that may be transmittable to service users to their line manager and occupational health advisor.

**Informal carers** look after their partners, spouses, relatives, friends, and neighbours on an informal basis. They often have no formal training in care, but practice staff should be able to provide information about any care procedures they will undertake.

## 2. LOCAL SOURCES OF ADVICE

### **Oxfordshire Clinical Commissioning Group**

Infection control and nursing standards lead  
Floor 1  
Jubilee House  
5510 John Smith Drive  
Oxford Business Park  
South  
Cowley  
Oxford  
OX2 4LH  
Tel: 01865 336856  
Mobile: 07776 198052

### **Public Health England**

Thames Valley PHEC  
Public Health England  
Chilton  
Oxfordshire  
OX11 0RQ  
Tel: 0345 279 9879

Out of hours advice: 0844 9670083

### **Consultant Microbiologist**

The John Radcliffe Hospital  
Headley Way  
Headington  
Oxford  
OX3 9DU

Tel: 0300 304 7777 (main switchboard)

## 3. WHY INFECTION PREVENTION AND CONTROL IS IMPORTANT

Many infections have the potential to spread in the health care environment and both service users and care workers are at risk. In general practice activities are undertaken which may increase the risk of infection. Infections acquired in primary care may have serious consequences for service users, they may worsen underlying medical conditions and in some instances may be life threatening.

Service users receiving care may have an increased susceptibility to infection due to a number of risk factors:

- Age
- Immune status
- Poor nutrition
- Underlying medical conditions such as cancer, diabetes, heart problems

- Antibiotics and other medications
- Incontinence
- Surgical procedures
- Indwelling medical devices such as urinary catheters
- Breaks in the skin

In recent years infection prevention and control has also become more of a challenge across all health care settings due to complexity of care and the increasing numbers of organisms that have become resistant to treatment with antibiotics. Resistant organisms that have increased include:

Extended Spectrum Beta Lactamase producers(ESBLs).  
Glycopeptide resistant enterococci (GRE).

The Department of Health and Department of Environment, Food and Rural Affairs have published the 'UK Five Year Antimicrobial Resistance Strategy 2013 to 2018' (2013) to tackle the increasing emergence of resistant organisms coupled with the halt in development of new antibiotics. The paper looks at multifactorial approaches to reducing the use of antibiotics with a 7 point plan of action. It can be accessed at:  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/244058/2013\\_0902\\_UK\\_5\\_year\\_AMR\\_strategy.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/244058/2013_0902_UK_5_year_AMR_strategy.pdf)

Of note for primary care is the recommendation of the 'TARGET' tool kit to help reduce and focus antibiotic prescribing in the community. This can be accessed using the following link:  
<http://www.rcgp.org.uk/TARGETantibiotics/>

As well as the challenge posed by the emergence of resistant microorganisms many general practices have extended their activities to include interventions that may carry an increased risk of infection to service users e.g. carrying out minor surgical procedures. It is essential that appropriate infection prevention and control measures are in place to provide a safe environment that minimises the risk of infection to all.

#### **4. THE CHAIN OF INFECTION**

In order for infection to occur several things have to happen. This is often referred to as the Chain of Infection. The six links in the chain are:

##### **The source of the microorganism – Link 1**

The main types of microorganism causing human infection include bacteria (e.g. salmonella), viruses (e.g. hepatitis A, B or C), fungi or yeasts (e.g. candida). Infected individuals may act as a source of infection for others because the microorganisms that are found on the skin and in body fluids could be passed on to others.

##### **Reservoirs for microorganisms – Link 2.**

These are places where microorganisms may live and survive. Reservoirs can include people, animals, the environment, food or water. Contaminated food may act as a reservoir, for example if it is contaminated with salmonella or campylobacter. If the meat is not thoroughly cooked, those eating it may become infected. Other examples of reservoirs for microorganisms include articles such as towels, flannels, wash bowls, bed pans,

contaminated equipment etc.

### **The way microorganisms leave the body – Link 3**

Sometimes termed “portal of exit”, this can occur in a number of ways. For example, *Clostridium difficile* leaves the body in the faeces and, if diarrhoea is present, high numbers of *C difficile* microorganisms and spores are excreted and can contaminate the environment and equipment.

### **The method of spread of microorganisms from person-to-person – Link 4**

Microorganisms are spread in several ways. These include direct or indirect contact (including ingestion, sexual contact, mother to foetus, injection or inoculation) and some infections are airborne and are inhaled, e.g. influenza and pulmonary tuberculosis.

### **Unwashed hands are the most common way to spread infection.**

Microorganisms may be present in any body fluids (excretions and secretions). If hands come into contact with body fluids they may become contaminated and carry microorganisms from one person to another if hands are not washed. In addition the microorganisms can be spread from person-to-person via a contaminated environment (e.g. dust) or equipment.

Some infections may be spread via the air, such as the cold and influenza viruses. The infection may be spread in droplets or aerosols produced by coughs and sneezes. Some childhood illnesses are also spread in this way.

### **Microorganisms enter into the body. - Link 5**

This is sometimes referred to as the “portal of entry”. In order for microorganisms to cause an infection they must gain entry into the body. Different microorganisms have different ways of entering our bodies. For example, salmonella needs to be ingested (eaten), others may cause infection if they are inhaled e.g. influenza.

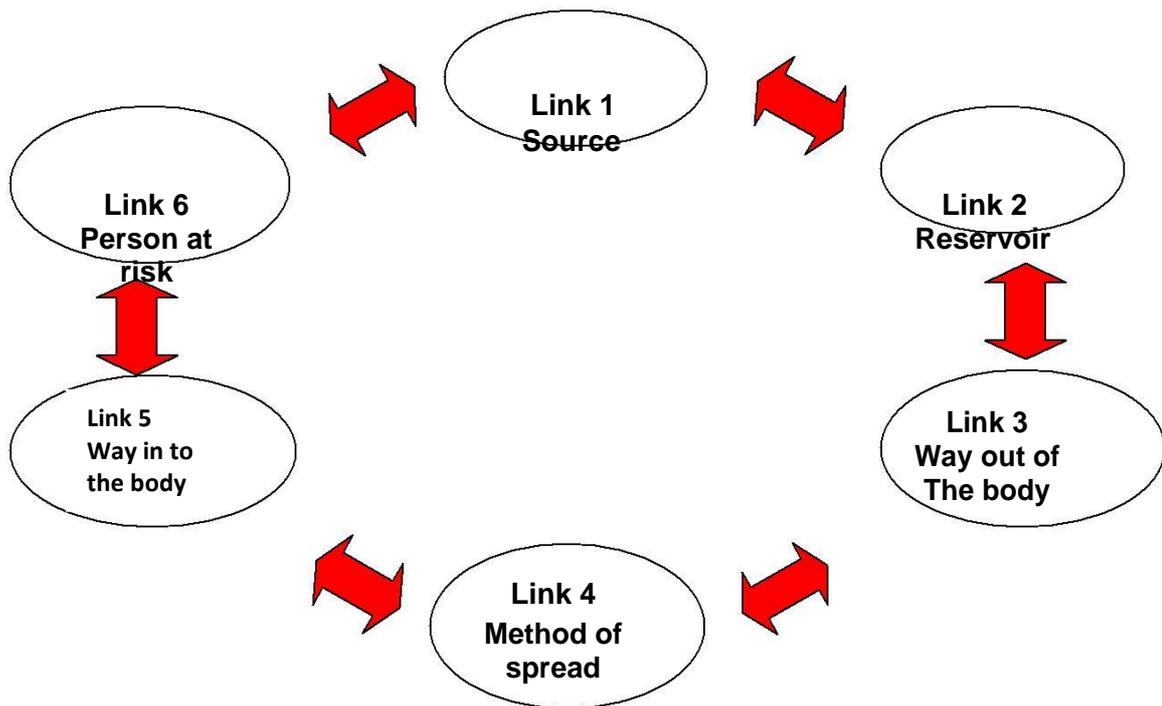
Others, such as hepatitis B, enter the bloodstream via broken skin, injection or sexual intercourse.

### **A susceptible person (person at risk of infection) - Link 6**

Once microorganisms have gained entry to the body they will only cause infection if the person is susceptible to infection. In many cases the body’s defence mechanisms will prevent infection occurring. People may develop infections if the body’s natural defences are breached and the microorganisms are in sufficient numbers to cause illness. Immunity to some infections can be developed after being infected (e.g. chickenpox) or after immunisation (e.g. hepatitis B and influenza).

Certain people are more susceptible or at greater risk of infection for a variety of reasons. People who are very young or the very old are more at risk because their immune system may not be developed or may be less efficient. In addition, some medications, such as steroids and cytotoxic agents can damage the immune system and increase the infection risk as can underlying diseases such as diabetes, blood disorders, cancer and HIV.

## The Chain of Infection



## **Breaking the chain of infection**

Breaking the chain of infection by targeting one or more links can prevent the spread of infection. This usually involves:

Eradicating the source of infection through appropriate antimicrobial therapy; Preventing the method of spread through infection prevention and control measures;

- such as hand and personal hygiene;
- use of Personal Protective Equipment ;
- environmental cleaning;
- decontamination of equipment;
- disposal of waste
- protecting the individual by immunisation

Preventing microorganisms from entering the body by:

- wearing protective clothing;
- using an aseptic technique when handling invasive devices or dressing wounds;
- covering wounds and insertion sites with sterile dressings

It will not be possible to identify all service users who have an infection. Some diseases are infectious before any signs develop. Some infections may not show any signs or symptoms, such as hepatitis B or HIV. Some people may carry a microorganism without developing the infection themselves, e.g. salmonella or MRSA. This is known as colonisation. For this reason it is important for everyone to follow standard precautions at all times to help protect service users, care workers and others from infection.

## **5. ISOLATION OF SERVICE USERS WITH AN INFECTION (TRANSMISSION BASED PRECAUTIONS/ISOLATION PRECAUTIONS)**

In some situations it may be necessary to use additional infection prevention and control precautions known as transmission based precautions. Guidelines related to these circumstances are outlined in this section.

Appropriate advice can be obtained from those listed in section 2.

### **5.1 Service user placement/Isolation facilities**

This is about ensuring that individual service users with specific infections are segregated appropriately so that the risk of infection to other service users is minimised e.g. in waiting or communal areas. This is not usually an issue in general practice as the risk of infection is minimised by the implementation of standard precautions, however there may be situations where a service user may be a risk to others e.g. a child with chickenpox or a service user with influenza during a pandemic influenza outbreak. In these circumstances arrangements should be made to see the service user in their own home or in a separate area of the practice away from other service users. Further advice can be obtained from the OCCG infection control lead.

## 5.2 MRSA

### What is MRSA?

MRSA is an abbreviation for methicillin resistant *Staphylococcus aureus*. MRSA is a strain of *Staphylococcus aureus* which is resistant to methicillin or flucloxacillin. *Staphylococcus aureus* is a bacterium which can be carried on the skin; this is referred to as colonisation, this can be with either the resistant (MRSA) or sensitive strain (methicillin sensitive *Staphylococcus aureus*, MSSA) of the bacterium.

Approximately 30% of the population is thought to be colonised with *S.aureus*, although it is thought that only a small percentage of this is MRSA. The common sites of carriage are the nose, axilla (armpit), perineum, groin, skin folds or the umbilicus for both MRSA and MSSA.

It is normally harmless and these individuals are said to be colonised. If the microorganism gains access to tissues it may cause infections ranging from boils and abscesses to bronchopneumonia and septicaemia.

MRSA and MSSA can cause the same range of infections however MRSA can be more difficult to treat.

### What is colonisation?

Colonisation with MRSA occurs when the microorganism is present e.g. in the nose, skin folds, the axillae (armpits), groin or perineum, without any signs of infection. The bacterium may also colonise around indwelling devices, such as urinary catheters and percutaneous endoscopic gastrostomy (P.E.G) tubes. Chronic wounds such as pressure sores, and leg ulcers may also be colonised without causing any invasive infection. The wound may continue to heal while colonised with MRSA.

Healthy people are unaffected by colonisation with MRSA and may be unaware of its presence, however should a person develop an infection it may be that the colonising strain is responsible for the problem.

### What is infection?

Infection occurs when the microorganism enters the body and causes a host (person) response, such as pain, pyrexia, inflammation, or tissue damage. MRSA has the potential to cause a range of infections including minor skin infections, surgical site infections and bacteraemia. The severity of the infection will vary depending on a number of risk factors including the individual's general health and the area of the body infected.

### The impact of MRSA in the community

Service users who are colonised with MRSA may be aware of its presence and colonisation with MRSA does not produce symptoms; a proportion however may develop an infection which requires treatment.

MRSA may be no more dangerous or virulent than methicillin sensitive *Staphylococcus aureus* (MSSA), but it is more difficult to treat and continues to evolve into new potentially dangerous strains.

## **MRSA in Hospitals**

A great deal of work has been put into reducing the level of MRSA bacteraemia in hospital over the last few years and there is now a 'Zero tolerance' approach to MRSA bacteraemia (where MRSA is isolated in a blood culture). Other sites of the body can be affected such as wounds or urinary tract however there is little data to show rates of MRSA infection in these sites.

## **How is MRSA Spread?**

MRSA can be spread in two ways:-

### **Endogenous (Spread from one part of the body to another in the same person)**

A service user colonised with MRSA may transfer the bacteria from one part of the body to another through touch.

### **Exogenous (Spread from person to person)**

This may occur via the following routes

Directly on the hands of healthcare workers during treatment

Indirectly via communal shared equipment or the environment.

Service users with MRSA may contaminate objects and the environment through skin scales which may transfer to other service users either directly or via care workers hands and shared equipment.

Service users may also acquire antibiotic resistant strains as a result of antibiotic exposure.

## **Who is at risk?**

Service users with the following are at greatest risk of infection-

- Intravenous devices;
- Surgical wounds;
- Chronic wounds e.g. pressure sores, leg ulcers;
- Repeated hospital admissions;
- Immunocompromised;
- Complex medical conditions;
- Multiple courses of antibiotics;
- Indwelling medical devices e.g. lines, catheters, and enteral feeding tubes.

## **How should service users with MRSA be cared for?**

Carriage of MRSA should not prevent discharge from hospital to a service users own home, or to a care home.

If standard hygiene measures (such as hand hygiene) are followed, service users colonised or infected with MRSA are not a hazard to relatives, care workers or other service users.

The practice of standard infection prevention and control precautions in the care of all service users will prevent most cases of transmission of MRSA.

Good hand washing/hygiene is the most important method of preventing the spread of infection.

Sores or wounds should be covered with an appropriate dressing which is changed regularly. (An appropriate dressing is one that is impermeable such as a hydrocolloid, or a vapour permeable film or membrane).

## **Is MRSA a risk to care workers and others?**

MRSA does not usually pose a risk to care workers unless they have risk factors for infection, for example they may be immunocompromised or have skin conditions such as dermatitis or eczema. Care workers should report any dermatological problems to their Occupational Health Advisor and their GP.

The family and friends of affected service users should be encouraged to undertake thorough hand hygiene; they do not need to take any special precautions and should not be discouraged from normal social contact or from contributing to care packages.

### **Additional precautions in residential and nursing home settings**

Service users may share a room as long as neither they nor the person they share with has open sores or wounds, a urinary catheter or other invasive devices.

Service users may receive visitors and go out of the home to visit their family and friends and for other social activities provided any wounds are covered with an appropriate dressing.

Service users may join others in communal areas such as sitting or dining rooms. Complete procedures for other service users before attending to service users with MRSA.

Perform dressings and clinical procedures on a service user with MRSA in the service users room/treatment room with the door closed.

### **Admission to hospital and outpatient appointments**

If admitted to hospital, the receiving ward/department must be informed of the service users MRSA history, even if not currently positive.

Inform the hospital staff if the service user is to attend the hospital as an outpatient or day case.

If an ambulance is required the service should be informed and they should use standard precautions.

### **MRSA Screening**

The Department of Health recommends screening individuals who are being admitted to high risk services in a hospital setting.

MRSA screening involves testing all service users who are admitted to hospital or attending the day case department, so that those who do carry the bacterium can be identified. The MRSA bacterium is more likely to cause an infection in people who are unwell, which is why it is so important to identify the carriers before they develop an infection or before MRSA is spread to others.

By identifying those service users who are carrying MRSA when they are admitted to hospital, they can be offered the best and most appropriate care and treatment in a timely manner.

Care worker screening should **never** be undertaken except on the advice of the Health Protection Team.

### **Treatment and decolonisation**

Skin decolonisation is the process by which the MRSA organisms that are multiplying on the skin are removed or the number of organisms is reduced. It should not be routinely carried out on patients who are found to be colonised in the primary care setting,

In exceptional circumstances OUHFT may require support from general practice to

commence decolonisation therapy, for example where a patient is unable to attend secondary care prior to their surgery date. On these rare occasions decolonisation should be prescribed as per OUHFT guidelines, as detailed below:

If any queries arise from this contact OUHFT microbiology services.

### **Topical regime for skin decolonisation of MRSA used in Oxford University Hospitals NHSFT**

#### **Antiseptic body wash (Chlorhexidine)**

- The treatment should be applied daily for five days
- 
- Wet skin before application.
- Antiseptic wash should be applied neat as a liquid soap/shampoo.
- Using approximately 30mls of solution, apply to the skin using a disposable cloth.
- Wash vigorously from head to toe paying particular attention to known carriage sites such as the axillae (armpits), groin, and buttock areas.
- The solution should remain on the skin for at least one minute before being thoroughly rinsed (preferably in a shower if possible).
- Hair should be washed twice within the 5 day course of treatment if the service user's condition allows. (N.B. chlorhexidine can change the colour of hair dyes).
- Dry thoroughly using clean towels.
- Towels should be laundered daily and cloths discarded after use during the course of treatment.
- Clean clothing, bedding and towels should be used after each body and hair wash during the course of treatment.

#### **Naseptin nasal cream:**

Apply Naseptin cream to both nostrils four times a day for five days in combination with antiseptic wash for five days. Please note that naseptin is not suitable for individuals who have a peanut or soya allergy.

## 5.3 Clostridium difficile

### What is *Clostridium difficile*?

*Clostridium difficile* is an anaerobic bacterium (i.e. does not grow in the presence of oxygen). It is found in the large intestine and is carried asymptotically in about 5% of healthy adults. It is also common in babies - up to two thirds of infants have it in their intestines up until the age of 2 years, but it rarely causes problems. It is estimated that as many as 20% (one in five) of service users over the age of 65 carries *C. difficile*.

Individuals can be colonised with *C difficile*, that is carrying the organism without any signs or symptoms of infection. *C difficile* colonisation is usually controlled by healthy or "good" bacteria in the intestine which have a protective effect.

Individuals may develop illness as a result of *C difficile* infection and this is referred to as CDI.

### What are the signs and symptoms of CDI?

*C. difficile* is the major cause of antibiotic associated diarrhoea and colitis. Symptoms include:-

Type 5-7 stool or stool which takes on the shape of its container, for which no other explanation can be given; (Bristol Stool Scale can be accessed via this link:[http://occg.oxnet.nhs.uk/Corporate/Docs/Infection%20Control/bristol\\_stool\\_chart.png](http://occg.oxnet.nhs.uk/Corporate/Docs/Infection%20Control/bristol_stool_chart.png))

Fever or low grade pyrexia;

Nausea and /or loss of appetite;

Abdominal pain and tenderness;

Raised white cell count or raised levels of C- reactive protein;

Acute rising Creatinine levels;

The presence of *Clostridium difficile* toxin from microbiological sampling

Pseudomembranous colitis is seen on endoscopy.

*C difficile* infection can result in severe colitis leading to bleeding and ulceration of the intestine, megacolon and at worst perforation of the bowel.

### What causes CDI?

CDI is nearly always linked to and triggered by the use of antibiotics. The effect of antibiotics, however, may not immediately be apparent and CDI can occur up to six weeks after treatment. Other factors that increase the risk are gastric surgery/interventions, tube feeding and medications that inhibit gastric acid production and gastric motility e. g .PPIs (proton pump inhibitors).

### Who is at greatest risk of CDI?

Acutely ill service users in hospital who are receiving or who have had multiple courses of antibiotics.

Any service user treated with broad spectrum antibiotics, most commonly elderly service users with serious underlying disease.

### How is CDI diagnosed?

*Clostridium difficile* infection should always be considered as a diagnosis in its own right, not a side effect of other treatments. The following should be used to confirm

or refute the diagnosis.

An episode of diarrhoea, type 5 – 7 on the Bristol Stool Scale ;accessed via this link [http://occg.oxnet.nhs.uk/Corporate/Docs/Infection%20Control/bristol\\_stool\\_chart.png](http://occg.oxnet.nhs.uk/Corporate/Docs/Infection%20Control/bristol_stool_chart.png) ,or stool which takes on the shape of its container, and **which cannot be attributed to any other cause. Other causes should include dietary considerations, any medications which may alter bowel habit, (see Appendix 3), and any chronic bowel disease.**

If no other cause can be found a stool sample should be submitted to the laboratory. Do not send samples of formed stool to the lab as they will not be processed.

If the first sample is negative but symptoms persist and the service user appears unwell send a second sample 24 hours later.

It should be noted that *C.difficile* toxin can be isolated in stool after clinical recovery. Please do not send further stool samples to check for *C.difficile* eradication.

The following basic principles shown in the table below apply when CDI is suspected. These principles comply with specific duties of the Health and Social Care Act (2008) and are used in the 2013 PHE management and treatment of *Clostridium difficile* as an example of good practice.

|          |   |
|----------|---|
| <b>S</b> | Suspect that a case may be infective where no alternative cause for diarrhoea can be identified                                 |
| <b>I</b> | Isolate the service user while determining the cause of the diarrhoea.  |
| <b>G</b> | Gloves and aprons must be used for all contacts with the service user and their environment.                                    |
| <b>H</b> | Hand washing with soap and water will be carried out before and after each contact with the service user and their environment. |
| <b>T</b> | Test the stool for toxin.   |

### **How is *Clostridium difficile* spread?**

A service user who has *C. difficile* associated diarrhoea may excrete large numbers of microorganisms and spores in their liquid faeces. These can contaminate the environment, surfaces and equipment used by and in the immediate vicinity of the service user. Spores can survive in the environment for long periods and are a potential source of hand to mouth (faecal oral) infection in other service users particularly those receiving antibiotics.

### **What can be done to prevent the spread of *Clostridium difficile*?**

Preventing spread relies upon six important components;

- Prudent antibiotic prescribing;
- Isolation of symptomatic service users;
- Thorough hand hygiene with soap and water;
- Appropriate use of personal protective equipment (PPE);
- The use of service user specific equipment,
- Thorough cleaning of equipment and the environment;
- Where possible reduce the use of broad spectrum antibiotics.

In health care environments such as care homes and hospitals the service user with *C. difficile* associated diarrhoea should be cared for in a single room.

Thorough hand hygiene is essential. After caring for a service user with *C. difficile* associated diarrhoea, hands must be washed with soap and water using the recommended six stage technique (Appendix 9), alcohol hand rub is not sufficient.

Always use gloves and aprons for direct care with the affected service user and for other tasks carried out in the affected service users immediate environment. This is especially important when dealing with faeces or items that may be contaminated with faeces.

### **Does CDI require treatment?**

A laboratory result documenting the presence of *C. difficile* toxin should prompt a service user re-assessment; however service users who do not have symptoms of CDI will not require treatment.

- Treatment should aim to control symptoms and restore normal bowel flora.
- Any antibiotics that the service user is taking should be reviewed by the GP and stopped where possible.
- Other medication such as laxatives and other drugs that may cause diarrhoea should also be reviewed.
- Anti-peristaltic agents such as loperamide should not be prescribed.
- If possible medication which inhibits stomach acid production such as proton pump inhibitors should be reviewed and if possible discontinued.
- Treat using oral metronidazole. This should be prescribed for 14 days, 400mg TDS.
- Ensure that the patient knows to maintain good intake of fluids

### **Do probiotics prevent *C.difficile*?**

The evidence for the use of probiotics is inconclusive, imprecise and has been linked to rare but reported adverse side effects.

### **Can the service user attend hospital for diagnostic tests?**

The risk of spread arises from contact with faecal material.

Ideally the patient should be free of diarrhoea for 48 hours and passing normal stool prior to attending for diagnostic tests. If however this is not possible the receiving hospital must be informed that the patient has active *C.difficile* diarrhoea so that the appropriate isolation and cleaning procedures can be put in place.

### **Will the presence of *C. difficile* delay discharge or transfer?**

*C.difficile* should not prevent the discharge or transfer of a service user to or from a health care facility, nursing home or residential care. Any receiving organisation should be informed of the infection so that appropriate isolation and infection prevention and control measures can be put in place.

Service users can be discharged to their own home when they are clinically well and are able to manage any symptoms they may still have.

### **Are repeat stool specimens required?**

Repeat stool specimens for clearance are not required.

*Clostridium difficile* toxin may be present for many months after recovery from

symptoms however may still show as positive on testing. The patient is no longer considered an infection risk when they are 48 hours clear of diarrhoea and passing normal stool. The laboratory will not undertake *C. difficile* toxin testing within 21 days of the first positive specimen collection date.

### **Care of a service user with *C.difficile* infection (CDI)**

All service users in a care home or hospital setting with diarrhoea should be isolated until they have had no symptoms for a minimum of 48 hours and have passed a formed stool/stool that is normal for them.

Standard infection prevention and control precautions should be followed by all care workers at all times.

Remember to assist service users to wash their own hands after using the toilet/commode/bedpan.

- Care workers should wear disposable gloves and aprons when carrying out any care (i.e. not only when contact with blood and/or body fluids is anticipated).
- If the affected service user does not have their own en-suite toilet, use a dedicated commode (i.e. for their use only) which can remain in their room until they are well.
- Treat all linen as infected, and place directly into a water-soluble bag prior to removal from the room.
- Pay special attention to daily cleaning of the environment. Routine cleaning with warm water and detergent is important to physically remove any spores from the environment.
- After cleaning with warm water and detergent, wipe all hard surfaces with a chlorine based disinfectant (1000ppm). This is obtained by diluting Milton 1:10 or household bleach 1:100.
- Ensure that visitors wash their hands at the beginning and end of visiting
- It is important to ensure that you have adequate stocks of liquid soap, paper towels, disposable gloves and plastic aprons.
- Hand washing with soap and water is necessary when caring for service users with *C difficile* as alcohol gel will not inactivate the spores.
- Try to keep equipment for the sole use of the patient with *C.difficile*. If this is not possible due to limited resources then decontaminate the equipment using an anti-sporicidal wipe.
- Please refer to the *C.difficile* 'at a glance' document which can be accessed via this link  
<http://occg.oxnet.nhs.uk/GeneralPractice/Docs/C%20%20diff%20at%20a%20glance%20for%20GP%20updated%20032016.pdf>

### **When can these extra precautions be stopped?**

It is not necessary to send further stool samples to the laboratory to check whether the service user is free from infection. Additional precautions can be stopped when the service user has been completely free from symptoms for 48 hours and a normal formed stool/normal for that service user has been passed. Isolation precautions can also be stopped at this time.

Symptoms may recur in about one in five people, so if this happens, inform the GP and recommence all precautions.

Information leaflets for *Clostridium difficile* can be accessed via this link

#### **5.4 Extended spectrum beta lactamase producers (ESBLs), Glycopeptide resistant enterococci (GRE) and other resistant/ multi resistant microorganisms**

Over recent years there has been an increase in the number of microorganisms that are becoming resistant to antibiotics. These include extended spectrum beta lactamase producers (ESBLs) and Glycopeptide resistant enterococci (GRE).

Glycopeptides are a group of antibiotics which include vancomycin and tiecoplanin. Although these microorganisms have the ability to cause infection most service users identified with them will be colonised rather than infected and will not require treatment. More information can be accessed via Public Health England website:

<https://www.gov.uk/government/publications/extended-spectrum-beta-lactamases-esbls-treatment-prevention-surveillance/extended-spectrum-beta-lactamases-esbls-faqs>

The infection prevention and control measures are similar to those for MRSA, section 5.2 however decontamination with body wash and naseptin is not required.

##### **What is an ESBL?**

ESBL an abbreviation for extended spectrum beta lactamase. ESBLs are not organisms in their own right, but are the name given to a number of bacteria that release enzymes which make the bacteria resistant to antibiotics. The types of bacteria commonly associated with ESBL production are organisms which normally inhabit the bowel such as *Escherichia coli* or klebsiella. The bacteria are then referred to as an 'ESBL producers'. ESBLs are resistant to nearly all antibiotics and treatment options are very limited.

##### **Glycopeptide-resistant enterococci (GRE)**

GRE are bacteria that are commonly found in the faeces of humans and animals. Two main types may cause disease in humans: *Enterococcus faecalis* and *Enterococcus faecium*. In recent years some species of enterococci have become resistant to certain antibiotics, especially glycopeptides.

In the past these organisms were known as Vancomycin-resistant enterococci (VRE) but today they are known as Glycopeptide-resistant or GRE. These organisms tend to cause colonisation rather than infection, though some, more vulnerable people may develop more serious infection such as urinary tract infection and bacteraemia (blood infections).

Infection is often linked with the presence of invasive devices such as catheters and intravenous (IV) lines. Antibiotics are available to treat these infections. GRE can live harmlessly in the gut of healthy and sick people. Its presence doesn't necessarily need treatment with antibiotics. People who are more at risk of acquiring and becoming infected with GRE include service users needing intensive care, those with immunosuppression (oncology, haematology and transplant patients), those undergoing abdominal or cardiovascular surgery or renal dialysis and those with invasive devices such as IV lines and urinary catheters.

##### **How are ESBLs, GREs and other resistant microorganisms spread?**

They may be passed from person to person by direct contact with a person who has an infection or carries the bacteria in their gut or on their skin. They may also be transmitted by contact with equipment and environmental surfaces that have been

contaminated with the bacteria.

As many of these resistant organisms live in the gut, service users who are incontinent may be a greater risk to others.

### **How can spread be prevented?**

In residential settings and hospitals, service users with resistant microorganisms should have their own room.

### **The simplest but most effective measure in preventing the spread of infection is thorough hand hygiene.**

In addition to standard precautions aprons and gloves should be worn for contact with the service user and their immediate environment. Wear gloves and aprons for handling body fluids, excreta, stomas, linen, waste etc. Discard on leaving the service user and wash hands.

- Hands must be decontaminated after giving any care or after handling linen
- Hands must be washed after handling any waste.
- Alcohol hand rubs can be used if hands are visibly clean.
- Dispose of urine or faeces promptly and with care.
- Use of a washer/disinfector for cleaning bedpans and commode pans.
- Use an aseptic technique when dealing with invasive devices (e.g. Hickman lines), catheters etc.
- Maintain high standards of environmental cleanliness. Clean equipment after each and every episode of use.
- Designate equipment for the colonised/infected service user.
- No special precautions are needed with crockery and cutlery.

If the service user is admitted to hospital or another residential setting, inform the care worker about the resistant microorganism so they can take appropriate precautions.

### **Who is at risk of acquiring resistant microorganisms?**

Frail service users in hospital or care homes, particularly those with long term indwelling devices such as a urinary catheter, are most at risk. The device may become colonised with bacteria creating a potential reservoir for infection. The following factors further increase the risk:-

- Old age;
- Multiple courses of antibiotics;
- Prolonged hospital stays or intensive care admissions;
- Prolonged illness or complex medical conditions e.g. renal dialysis service users; Those in long term residential care.

### **Are care workers at risk of acquiring resistant microorganisms?**

Care workers may pick up these microorganisms on their hands and clothing when caring for a colonised or infected service user. By following standard precautions the risk of care workers becoming colonised is minimised and these microorganisms are readily removed by hand washing and laundering.

Healthy people are not at risk from these microorganisms.

### **Will the service user require treatment?**

Service users who are colonised with no signs of infection will not require any treatment.

In care homes and in the community, the risk of serious infection from resistant microorganisms is low and treatment is rarely needed.

The GP should contact the microbiologist to carry out a risk assessment for each affected service user.

### **Does the service user require isolation?**

In residential care settings the service user does not need to be confined to their room. All clinical procedures should be carried out in the service users room. It is important that urine and faeces can be managed and contained and that standard infection prevention and control precautions are followed. Any spillages should be cleaned away immediately (i.e. clean with general purpose detergent, followed by wiping over with hypochlorite solution).

## **5.5 Influenza**

### **What is influenza?**

Influenza is a viral respiratory infection that tends to occur during the winter months. The two main types of influenza causing disease in the UK are influenza type A and B, but new strains and variants of the virus emerge each year. The incubation period is 2-3 days and cases are infectious from 1 day before the onset of symptoms and for up to 5 days after the onset. Outbreaks may occur in communities and communal settings such as schools and care homes.

When the number of cases exceeds that normally expected, this is defined as an epidemic. If a completely new strain of influenza virus emerges, to which the population has no previous immunity, it may result in a global outbreak, known as a pandemic, which can affect large numbers and have a high death rate.

The onset of influenza is sudden with a high fever (> 38.9 C), dry cough, headache, aches and pains in the joints and muscles, chills and a general feeling of tiredness. Fever usually reduces after the second day and the nose may become stuffy and a sore throat may develop. People with influenza should stay at home and rest, drink plenty of fluids and may find symptom relief with painkillers, cough mixture etc.

Antibiotics are not required unless there is also a bacterial infection.

### **Who is at risk?**

Most people recover from influenza within a few days. However, influenza may be serious in new-born babies, people aged over 65 years and people of any age with existing chronic diseases. High-risk conditions include people with cardiac, respiratory, renal and liver disease and those with impaired immune systems. Bronchitis and secondary bacterial infections such as pneumonia can result in hospital admission and can be life-threatening.

### **How is influenza spread?**

Influenza is highly infectious and is one of the most difficult infectious diseases to control because the virus spreads rapidly and easily from person to person. This is through two routes:

- Direct via droplets expelled from infected people (coughing, sneezing and talking) which land on the mucous membranes of other people and enter the body.
- Indirect via hands touching contaminated surfaces, and then touching the nose, mouth or eyes.

The infection spreads easily within households and settings such as care homes and other institutions where individuals live or work in a shared environment.

The good news is that careful hand hygiene and environmental cleaning can easily deactivate the virus.

### **How can influenza be prevented?**

Each year a new influenza vaccine is developed which provides immunity against the strains of influenza circulating that year. Every autumn the vaccine is offered to anyone aged over 65 years, people with a high-risk condition and their carers, people residing in care homes and front-line health and social care staff. A new programme of influenza vaccination now includes children aged between 2 and 6 years old. Antiviral drugs can be offered to at-risk groups when influenza is circulating in the community. Health and social care teams should report any suspected cases in their care to the GP and any clusters to the Health Protection Team.

### **How can the spread of influenza be avoided?**

People with influenza should:-

- Try to stay away from contact with others during the infectious period;
- Stay in their own room, if living in a care home;
- Use disposable tissues and wash hands after coughing and sneezing.

Carers should:

- Wash their hands after giving care, handling used tissues or items contaminated with respiratory secretions;
- Keep the environment clean.

### **Pandemic flu – what is it?**

Pandemic flu is when there is a worldwide outbreak of flu. This happens when a new flu virus that is able to spread easily from person to person emerges. Because the virus is new, the human immune system will have no pre-existing immunity, and the majority of the population will therefore be susceptible. This makes it likely that people who contract pandemic flu will experience more serious disease than that caused by seasonal flu.

There were three worldwide flu pandemics in the last century in:

- 1918/1919 “Spanish flu”
- 1957/1958 “Asian flu”
- 1968/1969 “Hong Kong flu”.

These pandemics were caused by new subtypes of flu that were probably formed by a combination of genes from both avian (bird) and human flu viruses. There was concern that the circulating strain of avian influenza/bird flu (H5N1) may combine with another strain, or adapt to the human body and result in a pandemic, however this has not happened to date. Pandemics of the previous century spread around the

globe in six to nine months, but because of the speed of international travel today, it would probably reach all continents within three months or less.

2009 saw the World Health Organisation declare a pandemic due to sub type H1N1, also known as swine flu. As this was a new subtype very few people had been exposed to the virus previously and thus spread rapidly from country to country. Most cases reported in the UK were mild, as was the case globally. A small number of cases led to serious illness and/or death but this was mainly seen in the individuals who were at risk i.e. very old, very young or with multiple chronic co-morbidities. The WHO declared the pandemic over in August 2010. The virus H1N1 now circulates worldwide and is included routinely in the seasonal flu vaccine.

### **What can be done to prepare?**

As a provider of community care, it is important that you have a plan prepared in the event of an outbreak of pandemic influenza.

If a vaccine is available for the strain of flu causing the pandemic both service users who are perceived to be at a greater risk and care workers will be offered vaccine. All care workers who have direct contact with service users should be encouraged to have the vaccine. This should minimise the impact of the pandemic on the service provided by the practice.

The service will have to be managed with fewer care workers, as it is expected that in a pandemic, healthy younger people will also be infected. Over the course of the pandemic up to 50% of the population may become ill, and care workers will be off work, either because they are ill themselves, or because they are caring for relatives. The plan should include how to cope with this situation. Identify which aspects of the service are essential and must carry on, and which might be stopped if necessary.

How many care workers do you need to do the basics?

Other very practical issues are:

- Health and Safety - you still have a duty to protect your employees;

- Training and education - for care workers who may be asked to take on alternative roles;

- Staff welfare - e.g. sick leave policy, protecting those most at risk such as pregnant women;

- Parents - what to do if schools close.

Identify a person within the practice that can start writing your plan.

Guidance is published nationally and regionally and is updated regularly. This is available at <https://www.gov.uk/guidance/pandemic-flu>

In the event of future pandemics guidance will be issued at global, national and local levels for all health care providers including those in general practice.

## **5.6 Creutzfeldt Jakob Disease (CJD)**

### **What is CJD?**

CJD is rare and fatal degenerative brain disease. It is thought to be caused by infectious proteins known as prions, which are resistant to conventional disinfection

and sterilisation processes. It has a long incubation period, up to 25 years, and causes sponge-like gaps to appear in the brain tissue. CJD cannot spread by normal contact.

There are 4 types of CJD:-

**Variante CJD (vCJD)** generally affects younger people and early symptoms include personality changes and psychological symptoms. It has been associated with exposure to the prion agent responsible for Bovine Spongiform Encephalopathy (BSE).

**Sporadic CJD** is currently the commonest form of CJD occurring randomly in the community and affecting about 50 people per year. It usually affects people over 45 years of age.

**Familial CJD** is responsible for about 15% of cases and is inherited. It is caused by mutation in the prion protein gene.

**Iatrogenic CJD** is acquired during medical treatments, particularly in the 1970s, such as grafts of human dura mater and corneas, administration of human pituitary derived growth hormone and the use of contaminated instruments during surgery.

The long pre-clinical phase is followed by clinical features, which vary depending upon the type of CJD. The symptoms are progressive and there may be rapid deterioration.

CJD can attract a great deal of media interest, so service user confidentiality is essential.

Symptoms commonly include:-

- Personality changes and loss of intellect and memory;
- Sensory and motor neurological deficits;
- Myoclonic jerks, chorea, or dystonia;
- Difficulty speaking, swallowing, moving and incontinence;
- Coma and death.

### **Infection prevention and control precautions**

Use standard infection prevention and control precautions, e.g. the use of protective clothing, washing of contaminated clothes and linen, care with sharps and waste.

Provide relatives with protective clothing for handling body fluids and information about the importance of hand hygiene and infection prevention and control.

Health care workers should assess all service users for the risk of CJD prior to any invasive procedure.

Use single-use, disposable items. This is especially important during procedures involving the nervous system, such as lumbar puncture, and certain dental procedures.

After death, place the body in a body bag labelled with a "danger of infection" sticker. The funeral director should not embalm the body, but may carry out cosmetic work as usual. Relatives and friends may view the body and touch it as normal. There are no restrictions on burial or cremation.

Liaise with the PHEC for more information and support.

## Other infections

Information on other infections that may occur in the community and cause outbreaks can be found in Appendices 4 – 7

- *E.coli* 0157
- Pulmonary TB
- Chickenpox/shingles
- Scabies

## 6. OUTBREAKS

### 6.1 General

In the community setting several individuals may become ill with the same infectious disease. If these cases are linked in time, place and person an outbreak may be suspected. The GP and other care workers in primary care have important roles to play in the early detection of such outbreaks and should contact PHE if an outbreak is suspected so that appropriate action can be taken at the earliest opportunity to prevent further spread.

#### General control measures

Different infectious diseases are spread in different ways. By using standard infection prevention and control precautions outlined in section 5, the risk of transmission of infection from body substances (such as blood, faeces, urine etc.) is very much reduced.

#### What is an outbreak?

An outbreak is defined as two or more linked cases of the same infection. These cases may be connected in time, place or person.

Practice staff should be aware of the microorganisms that have the potential to cause outbreaks such as norovirus, salmonella, *E. coli* 0157 and influenza.

Care workers should also be aware that a potential outbreak does not depend on having received positive laboratory results; the presence of similar symptoms in two or more connected cases is sufficient. Seek advice promptly should two similar linked cases be identified.

#### Action to take if an outbreak is suspected

If a general practitioner suspects an outbreak they should inform PHE. In community settings The Health Protection Team will advise on any infection control measures that need to be taken to manage the outbreak and prevent further spread.

**6.2 Suspected food poisoning** Gastro-intestinal illnesses which result in diarrhoea and or vomiting may have many causes including viruses, bacteria, toxins and chemical contaminants. Causative infective microorganisms include campylobacter, *Clostridium difficile*, *cryptosporidium*, *E coli* 0157, giardia, Norovirus, salmonella, shigella, etc. The symptoms vary depending upon the cause of the infection. Some cause mainly vomiting whereas others cause mainly diarrhoea. Other possible symptoms may include abdominal pain, nausea or fever and bloody diarrhoea. Infections may have an incubation period of a

few hours, or several days. Some infections resolve without treatment whilst others need to be treated.

Microorganisms that are most likely to cause food poisoning are:

*Campylobacter*

*Salmonella*

E Coli 0157 (Information on E coli 0157 can be found in Appendix 4)

*Clostridium perfringens*

*Staphylococcus aureus*

### **How is food poisoning spread?**

Food poisoning can be spread in the following ways:

- Consumption of undercooked or raw meat, poultry and raw eggs. These foods contain harmful microorganisms or toxins which are destroyed during cooking. When these foods are not cooked thoroughly or eaten raw the microorganisms and toxins can cause illness.
- A food handler with a gastrointestinal disease, or who does not practice good hygiene, can spread microorganisms onto the food.
- Humans and animals can also be sources of infection. Direct or indirect contact with faeces or vomit of an infected person or animal where the microorganisms are then ingested through the mouth, can spread the disease.

If it is suspected that the outbreak may be a result of food poisoning the General Practitioner must inform the PHEC and the Proper Officer of the Local Authority, usually the CCDC. The PHEC will make an initial assessment to see whether the suspected outbreak is likely to be due to a viral infection or food poisoning. Any of the following should be reported as a suspected outbreak of food poisoning:

- Any service user diagnosed as having salmonella, campylobacter or other food related infection.
- Diarrhoea and/or vomiting in two or more cases in the same environment e.g. place of work, school or care establishment.
- Any service user diagnosed by a doctor as having food poisoning.

### **6.3 Closure of premises**

It is much better to be cautious, and to report early, rather than to wait until there is a major problem.

In the event of an outbreak of any gastro-enteritis, food poisoning or other communicable disease in the community the PHEC will be responsible for the investigation and management of the incident. The PHEC will advise on the infection prevention and control measures required. If the outbreak occurs in a residential care home the PHEC will advise them to stop admissions, day care and transfers to other homes or hospitals.

If the outbreak is associated with other institutions or premises e.g. schools, hotels, farms, the PHEC will advise whether or not premises should be closed whilst investigations are in progress. The PHEC will declare when any outbreak is over.

## 6.4 Further advice

Further advice about any infectious disease can be obtained from the PHEC, during normal office hours.

On-call Public Health Specialists may be contacted for emergency infectious disease matters out of normal working hours (See section 2 for contact details).

The PHE website provides up to date information about a wide range of infections and disease, visit:

<https://www.gov.uk/government/organisations/public-health-england>

In addition, the local authority Environmental Health Teams may have a range of information leaflets available on food-related illnesses.

## 6.5 Viral outbreaks of diarrhoea and vomiting

Outbreaks of vomiting and diarrhoea caused by viruses, usually norovirus, have unfortunately increased substantially in recent years.

These infections can occur in all settings especially where individuals live and work in a shared environment. In hospitals they can cause a major disruption to activities.

Outbreaks have been reported in:

- Hospitals and other care facilities
- Schools and nurseries
- Prisons
- Cruise ships
- Hotels

To identify outbreaks of diarrhoea and vomiting specimens should be sent if the service user has diarrhoea that is not attributable to any known cause e.g. aperients, P.E.G feed, other medications (Appendix 3).

Norovirus is highly infectious. It can be spread by the faecal oral route, via aerosols that are produced when people vomit, and by touching surfaces and objects that are contaminated with virus particles that are excreted in vomit and faeces.

The incubation period is 12 to 48 hours and the disease normally resolves within 48 hours. Elderly service users may suffer more adverse effects and may develop problems with hydration and nutrition.

### Symptoms of norovirus infection

- Vomiting, which may be projectile;
- Nausea;
- Diarrhoea;
- Headache;
- Fever;
- Muscle aches;
- Both service users and care workers affected.

The illness usually lasts for between 24 and 48 hours, and treatment is directed mainly at ensuring that service users do not become dehydrated.

## **Prevention of Spread**

Particular attention to good hygiene measures is essential and during outbreaks of norovirus it is important to wash hands with soap and water as alcohol rubs alone are ineffective. Alcohol rub can be used to complement washing with soap and water.

Use of PPE

Enhanced environmental cleaning with a hypochlorite (bleach) solution (see section 15).

Individuals with symptoms should remain off work/school until they have been symptom free for 48 hours.

In care homes and other residential settings service users should stay in their own rooms until they have been symptom free for 48 hours.

## **Hospital Admission**

Having a diagnosis of norovirus is not an indication for admission to hospital. There is no specific treatment for norovirus and most people will recover within 24-48 hours.

The only indication for admission from a care home setting is if the service users specific needs cannot be addressed.

If service users develop problems with nutrition and hydration the community matron should be contacted and they may be able to provide advice and support that will prevent unnecessary admission to hospital thereby reducing the risk of further spread.

A patient information leaflet on norovirus can be accessed via this link:

<http://m.patient.media/pdf/12500.pdf?v=6359676256937579>

## **7. SURVEILLANCE AND DATA COLLECTION**

### **7.1 Infection Records**

Although there is no statutory requirement for GPs to keep infection records it is good practice to keep a record on the number of cases of service users with specific infections such as MRSA, *Clostridium difficile* and other multi resistant organisms. This will help the practice identify any trends within their service user population and may be included in the annual report/statement of the Infection Prevention and Control Lead for the practice.

This also allows the practice to inform other care providers if a patient has an infection which requires specific infection prevention and control precautions, such as if they are going to a nursing home, acute hospital admission or ambulance transfer.

### **7.2 Root cause analysis (RCA) for MRSA and *Clostridium difficile* infections**

Mandatory reporting requires that all MRSA bacteraemia, cases of *Clostridium difficile* infection (CDI) and *E.coli* bacteraemia are reported to Public Health England as part of the Department of Health's mandatory surveillance programme for health

care associated infection. This data is submitted by OUHFT microbiology laboratory and infection control service.

All cases of MRSA bacteraemia have to be investigated to determine the possible cause of the bacteraemia. Patients admitted to acute services who are admitted with or develop the bacteraemia within 48 hours of admission are considered to be community acquired. The 4 weeks preceding the bacteraemia need to be investigated. This is completed through collaboration between the OCCG infection control lead and primary care staff.

All MRSA bacteraemia must be investigated within 14 days of notification; this timescale is mandated by PHE. The person undertaking the investigation should be the clinician responsible for the service user or a senior member of the clinical team. Within a community setting this may be the general practitioner, matron, ward manager or district nursing caseload holder.

The nominated member of staff undertaking the investigation must use the Post Infection Review (PIR) documentation as set out by PHE. This will be sent to the practice by the OCCG infection prevention and control lead.

New cases of CDI must be investigated using a root cause analysis process. The root cause analysis paperwork will be provided by the OCCG infection prevention and control lead. The clinician caring for the patient is required to complete this investigation within 14 days of notification, to allow presentation of the case to PHE during the health economy meeting.

### 7.3 Notifiable Diseases

Doctors (usually the GP) attending service users with certain infectious diseases (see the list below), whether confirmed or suspected, are obliged to notify PHE using a standard form available from <https://www.gov.uk/guidance/notifiable-diseases-and-causative-organisms-how-to-report>

Cases of other infectious diseases, which are not statutorily notifiable, (e.g. scabies and influenza) should also be reported when an outbreak is suspected.

Prompt notification and reporting of cases of infectious disease is essential for the monitoring of infection and assists with investigation and outbreak control.

Under the Public Health (Control of Disease) Act 1984 and the Public Health (Infectious Disease) Regulations 1988, certain diseases are notifiable to the Proper Officer of the Local Authority, usually the CCDC at the PHEC.

Statutory Notifiable Diseases (to Local Authority Proper Officers) under the Public Health (Infectious Diseases) Regulations 1988 are:

- Acute encephalitis
- Acute infectious hepatitis
- Acute meningitis
- Acute poliomyelitis
- Anthrax
- Botulism
- Brucellosis
- Cholera
- Diphtheria
- Enteric fever (typhoid or paratyphoid fever)
- Food poisoning

- Haemolytic uraemic syndrome (HUS)
- Infectious bloody diarrhoea
- Invasive group A streptococcal disease
- Legionnaires' disease
- Leprosy
- Malaria
- Measles
- Meningococcal septicaemia
- Mumps
- Plague
- Rabies
- Rubella
- Severe Acute Respiratory Syndrome (SARS)
- Scarlet fever
- Smallpox
- Tetanus
- Tuberculosis
- Typhus
- Viral haemorrhagic fever (VHF)
- Whooping cough
- Yellow fever

Report other diseases that may present significant risk to human health under the category 'other significant disease'.

It has been agreed that although the following diseases are not statutorily notifiable, nevertheless, the Consultant for Communicable Disease Control should be informed of their occurrence:

- AIDS
- Psitticosis
- Legionnaires' Disease
- CJD
- Listeriosis

## **8. ASEPTIC TECHNIQUE**

### **8.1 What is an aseptic technique?**

The term aseptic means 'without microorganisms'. The aseptic technique refers to the practice used to prevent the risk of infection. There are two aims of an aseptic technique: first, to protect susceptible sites on the service user from contamination by pathogenic organisms during care and nursing interventions and secondly, to protect the care worker from being exposed to potentially infectious blood and body fluids.

Aseptic technique will be used for surgical and other procedures such as undertaking wound dressings or performing an invasive procedure such as inserting a urinary catheter or when managing any invasive device.

Susceptible sites include:-

Normal body orifices (openings) such as urethra, vagina, mouth, eyes etc.  
Artificial orifices such as surgical and other wounds, tracheostomy sites, insertion sites for invasive devices such as urethral catheters or intravascular catheters etc.

The principles of aseptic technique involve:-

Hand hygiene;  
Personal protective equipment;  
Sterile materials, equipment and fluids for invasive procedures;  
Separation of sterile/clean equipment from contaminated items; Avoiding direct contact with susceptible sites;  
A technique to avoid introducing potentially harmful microorganisms into wounds and susceptible body sites.

There are two types of aseptic technique:-

**Surgical** technique used when undertaking procedures or handling equipment that breach the body's normal defences such as surgery, insertion of catheters, intravenous devices, tracheostomy etc.

**Non-touch or clean** technique may be used when the risk of contamination comes from microorganisms on the skin on carer's hands e.g. dressing chronic wounds, mouth care, eye care, emptying catheter bags, endotracheal suctioning etc.

## 8.2 Principles of aseptic technique

### Hand hygiene

The removal or reduction of microorganisms from carers' hands prior to aseptic procedures is essential.

Invasive procedures - hand disinfection using skin disinfectant such as alcohol hand rub or antiseptic solution.

Clean procedures - routine hand hygiene with soap and water is usually adequate unless the service user is particularly at risk of infection.

### Protective clothing

This is worn for two purposes:

Protect the service user from microorganisms on the care worker's skin and clothing;

Protect the care worker from microorganisms on the service user's body.

**Gloves** are recommended for using an aseptic technique:

Sterile gloves for a surgical technique.

Non-sterile gloves for a clean technique.

Gloves can give the wearer a false sense of security and they may touch contaminated equipment, environment or skin sites during an aseptic procedure.

If hands touch a contaminated object or part of the body during an aseptic procedure, the gloves should be removed, alcohol hand rub applied to the hands and a new pair of gloves worn.

**Aprons** are recommended for procedures where there is a risk of splash from body fluids or to protect open wounds from contamination from microorganisms on the clothing or uniform, e.g. during wound care.

**Eye/face protection** should be worn if there is a risk of splash from blood and body fluids to the face.

### **Equipment**

Sterile, single-use equipment is recommended for an aseptic technique. Ensure sterile packs are not damaged and are used before the expiry date. Keep sterile and non-sterile equipment/devices separate. If sterile equipment/devices are contaminated during an aseptic technique they should be replaced immediately.

**It is illegal to re-use single-use items and they must not be reused. Single use items are marked:-**



If the contents of single use packs e.g. dressing packs are partially used the unused contents must be discarded.

### **Dressing trolley or surface**

A dressing trolley or tray may be used when carrying out aseptic procedures. The trolley/tray should be cleaned at least daily and when soiled. They should be cleaned with detergent and warm water and dried with disposable paper towels.

Sterile dressing aids/packs are often used for dressing wounds etc. The polythene bag can be used to arrange the sterile items on the sterile field and then to remove the soiled dressing. The care worker places a clean hand into the bag to arrange the items on the packaging, which acts as a sterile field. The bag can be used to remove the dressing, and inverted to contain the soiled dressing. The bag can be attached to a trolley, or laid on a surface, to act as a disposal bag for other discarded items.

Avoid carrying out aseptic procedures immediately after activities that may have raised the level of airborne microorganisms, such as bed making and cleaning. Delaying for 30 minutes or so will allow the microorganisms to settle on surfaces and help to prevent contamination of open wounds from airborne microorganisms.

## **8.3 Procedure**

### **Equipment required**

- Clean dressing trolley
- non-sterile gloves
- sterile gloves
- dressing pack; appropriate dressings
- fluids for cleaning/irrigation
- hypoallergenic tape
- sterile scissors

- clinical waste bag (orange)

### **Technique:**

1. Explain the procedure to the service user
2. Wash hands using the six stage hand wash technique
3. Clean trolley surfaces with detergent and dry with paper towels
4. Gather equipment for the procedure and place on the bottom of the trolley
5. Ensure the service user is comfortable and their privacy and dignity is maintained
6. Put on a clean disposable apron and disinfect hands with alcohol hand rub.
7. Check sterility and expiry dates of equipment used
8. Open the outer cover of the pack and slide contents on to the trolley
9. Open the sterile field using only the corners of the paper, being careful not to touch the inner surface of the sterile wrapping. This will now be your sterile field.
10. Disinfect hands with alcohol hand rub
11. Put on clean disposable gloves and remove dressing
12. Dispose of dressings and gloves into the clinical waste bag
13. Disinfect hands with alcohol hand rub and apply sterile gloves using appropriate sterile technique. DO NOT contaminate the sterile field by dropping the glove packet onto it. Use another clean, flat surface to put it on before applying sterile gloves
14. Carry out procedure (for example clean wound and apply new dressing as necessary)
15. Make sure protective apron and waste materials are disposed of as clinical waste (orange bag)
16. Clean trolley using a combined detergent/disinfectant wipe
17. Wash hands using soap and water after procedure

## **9. WOUND/ULCER CARE**

The presence of a wound or ulcer can increase the risk of the individual developing infection or becoming colonised, for example with MRSA. It is therefore important to try to prevent wounds, such as pressure ulcers, if possible, and to prevent infection in existing wounds.

The key measures that can help to prevent wound infection/colonisation include:

- Hand hygiene before handling wounds or dressings;
- Wearing gloves when handling wounds;
- Using a wound dressing that is appropriate to the wound;
- Changing dressings when indicated and whenever the barrier-effect has been impaired (e.g. wet);
- Selecting a dressing that will promote healing;

These principles apply regardless of whether an aseptic technique or a clean technique is used.

### **9.1 Aseptic dressing technique**

Must be used for acute wounds such as surgical wounds, recent trauma, burns and

scalds and for chronic wounds in service users who are at greater risk of infection for example those who are immuno-compromised, have circulatory problems or diabetes.

For aseptic technique sterile gloves, sterile irrigation fluids and sterile equipment and dressing are used in addition to hand hygiene.

## **9.2 Clean dressing technique**

May be used for chronic wounds, such as leg ulcers and pressure sores in service users with normal infection risk.

Clean gloves, equipment and tap water may be used in addition to hand hygiene. However care should still be taken to avoid introducing microorganisms into the wound.

## **10. INVASIVE DEVICES**

Invasive devices such as urinary catheters, infusion devices, tracheotomies and P.E.Gs are increasingly being used by service users in the community, including use in the patient's own home. These devices will increase the risk of a service user developing an infection and the practice should have procedures in place for the management of these devices. The use of the device and the reason for its use should be documented in the service user's notes/care plan. The use of all devices must be reviewed and the review documented in the service users notes. The device should be removed as soon as it is no longer required. The service user should be monitored for signs of infection associated with the device. To reduce the risk of infection an aseptic or clean non-touch technique should be used when managing these devices.

In the community/own home setting service users with invasive devices will normally be cared for by the specialist teams for example continence, nutrition, respiratory or "hospital at home" teams. Any queries regarding care and management of these devices should be discussed with the appropriate team/nurse specialist.

## **11. VENEPUNCTURE**

A safe system of work is recommended for handling blood in order to protect both the patient and the healthcare worker. Vacuum blood collection systems have been shown to reduce injuries in care workers and are recommended for use wherever possible. They consist of a plastic holder, which contains or is attached to a double-ended needle or adaptor. A vacuumed tube is pushed onto the holder and blood drawn off. An aseptic technique should always be used. It is impossible to know of all service users infected with a blood-borne virus; therefore standard infection control precautions are important whenever taking blood.

Factors that increase the risk of skin contamination with blood include:

- A service user who is difficult to bleed
- A service user who is receiving anti-coagulation therapy

- A service user who is restless and un-cooperative
- A practitioner with broken skin or a cut
- A practitioner who is inexperienced

### **Infection control measures**

- Collect equipment, including a sharps container
- Use disposable tube-holders to avoid re-sheathing and prevent cross infection
- Decontaminate hands prior to the procedure and wear disposable gloves
- Decontaminate skin using an alcohol based swab. Ensure the skin is allowed to dry before taking blood
- Avoid touching the disinfected area.
- Use a vacuum blood collection system in accordance with manufacturer's guidelines and local procedures.
- When the needle is fully removed apply a swab to the insertion site and apply pressure to stop the bleeding (the service user may be able to do this).
- Discard the needle and tube-holder directly into a sharps container.
- Remove gloves and decontaminate hands.
- Label the sample and laboratory request forms with relevant clinical details and attach a bio-hazard/danger of infection sticker if necessary.

**Never** force blood from a traditional syringe and needle into a vacuumed tube. This can damage the sample, produce aerosols and separate the syringe from the needle.

## 12. MINOR SURGERY

There is little written guidance for general practitioners or others such as podiatrists undertaking minor surgery. The following guidelines are the consensus of accepted good practice and based on the following article:

A number of factors may be involved in post-surgical wound infection and little is written on infection risks that occur from surgery carried out in general practice.

However, the principles of asepsis apply to both primary and secondary care settings.

It is recommended that the facilities used and the practices implemented for carrying out minor surgery are of the highest possible standards to:

- Minimise the risk of infection to service users by the application of infection prevention and control measures
- Protect care workers by the application of standard precautions.

### 12.1 Definition of minor surgery

Minor procedures are those that are carried out under local anaesthesia and do not involve procedures below the deep fascial plane.

The operative site is usually limited in size by whether it can be anaesthetised locally. Some podiatry procedures and the debridement of leg ulcers are included in this category.

Some general practices have contracts to do more complex procedures such as joint injections, joint aspirations and vasectomies. For these procedures where there is a greater risk of infection consideration should be given to the provision of mechanically ventilated operating facilities.

### 12.2 Facilities for minor surgery

#### The room

Minor surgery should take place in a designated minor surgery or treatment room (which may or may not be used for other clinical activities). The room should be of a sufficient size with a floor area of 16-20 metres<sup>2</sup>.

The following facilities should be made available:

- A clinical hand wash basin with lever-operated mixer taps\*
- wall mounted liquid soap
- antiseptic hand solution
- alcohol hand rub
- paper towels should be available

\*it is noted in primary care that lever operated taps are not always available due to the age of the premises. In these scenarios thought should be given to a buddy system, so the operator does not touch the taps once hands are decontaminated or using a paper towel to switch taps off.

Furniture and equipment should be kept to the minimum which will allow care workers to work unhindered and facilitate cleaning. The furniture, fixtures and fittings should be made of/ or covered in material that is impervious, can be wiped clean and in a good state of repair.

Consideration should be given to replacing the facilities with lever operated taps and a HTM64 compliant sink as soon as possible

### **Ventilation**

For most minor surgery naturally ventilated rooms are acceptable. Where more complex procedures / or procedures where the risk of infection is increased mechanical ventilation **should be considered** especially if refurbishment or new build projects are planned. Advice can be sought from infection prevention and control specialists.

Electric extractor fans and vents should be inspected on a monthly basis and cleaned on a 3 monthly basis to prevent the build-up of dust.

### **Ceilings**

Ceilings should be made from non-porous material that can be easily cleaned and which will withstand regular cleaning. They should be of solid construction i.e. not a suspended ceiling and be free from cracks and visible defects.

### **Walls**

Plasterwork should be smooth, free from cracks and visible defects and made from non-porous material or painted with a product that can be easily cleaned and that will withstand regular cleaning. They should be of solid construction i.e. not tiled.

Walls only need to be cleaned when visibly soiled (usually every 6 months) by using detergent and water. Blood splashes should be removed as soon as possible.

### **Work surfaces and splash backs**

Work surfaces and splash backs should be made of smooth, impervious material. Work surfaces should be made of material that will withstand chemical disinfection e.g. stainless steel. They should have rolled edges and all joints should be sealed.

There should be separate work surfaces for clinical and non-clinical activities. Surfaces should be clear of extraneous items.

### **Windows**

**Natural ventilation** - the presence of opening windows is acceptable but they must be fitted with a fly screen.

**Mechanical ventilation** - windows must not be opened during surgery. To maintain service user privacy obscured glass is preferred.

Window curtains should be avoided where minor surgery is carried out. If present these should be laundered on a 6 monthly basis. Vertical wipe clean blinds are the most appropriate choice.

## **Doors**

These should be self-closing with a vision panel to facilitate observation of procedures and avoid unnecessary movement in and out of the operating room.

## **Floors**

Floors should be impervious, durable, non-slip with welded seams and made of material that can be easily cleaned. They should have continuous coving which extends a short height up the wall. Floors should be cleaned at least daily using detergent and water; this should take place at the end of the day or session. Blood splashes should be removed and the area cleaned as soon as possible.

**Fixtures and fittings** must be in good condition and of a design and material that can be easily cleaned.

## **Treatment /Examination Couches**

The covering should be made of wipe clean impervious fabric. Covers should be intact. The couch should be protected with disposable paper which is changed between each service user. The couch should be cleaned with general purpose detergent and hot water between each service user or a combined detergent/disinfectant wipe.

## **Privacy screen/curtains**

The use of curtains should be avoided where possible. Washable or disposable curtains should be used and changed at least every 3 months or sooner if visibly soiled or contaminated with blood and body fluids.

Screens that can be wiped clean should be used.

## **Hand wash sinks/Scrub-up facilities**

These may be within the designated room and should comply with current standards:

- Taps should be non-hand operated \*see note page 37
- Taps and basins should conform to HTM 64 with no plugs or overflows and the waste outlet offset from directly below the tap
- Sink should be large enough to avoid splashing
- Liquid soap in single use wall mounted dispensers
- Alcohol hand rub and or antiseptic hand scrub solution
- Single use paper towels in a wall mounted dispenser
- Foot or sensor operated bins with close fitting lids
- If nail brushes are used they must be single use disposable

## **Sterile pack storage**

There should be adequate space with due regard to the range of procedures carried out and the throughput of service users

Packs and instruments should be stored in a clean area away from possible contaminants and above floor level.

The design should minimize the collection of dust including appropriate racking or shelving.

Sterile packs and instruments should only be set out as required and not in advance.

Prior to use, sterile packs should be checked for integrity, sterility and expiry dates.

### **Room conditions (e.g. temperature)**

These should be within the standard range, i.e. 18 - 22<sup>o</sup> C, unless clinical considerations deem otherwise.

### **Lighting**

This should be adequate for the task to be undertaken in the facility. The light fittings should be of a suitable construction that allows easy cleaning and does not allow a build-up of dust. The light fitting should be cleaned at the end of each day using detergent and water or a combined detergent/disinfectant wipe and at the end of any procedure where the operator has to adjust the light fitting.

Lighting used for patient examination/minor surgery must be fitted with a heat filter. Fittings and illumination should be in accordance with BS EN 12464-1.

### **Specimen storage/transport**

There should be adequate facilities and space for the collection and storage of specimens.

### **Electrical services**

An uninterrupted power supply is required for minor procedures to avoid loss of lighting, and any other essential electrical equipment. A battery back-up is adequate for non-hospital facilities. This should be considered in general practice and requirements for uninterrupted power supply source assessed according to the type of procedure being carried out

### **Electrical sockets**

These should be splash proof and placed 1 metre above the floor.

### **Central heating radiators**

These can quickly accumulate high levels of dust so it is important that they are of a design that can be easily cleaned. They should be cleaned at a frequency that prevents build-up of dirt and debris. Radiators should be painted with paint that will withstand regular cleaning.

## **12.3 Infection Prevention and Control Practices**

### **Hand hygiene**

#### **Surgical hand disinfection**

Prior to minor surgery and other aseptic procedures the operator should carry out surgical hand disinfection. This procedure will result in the removal and destruction of transient microorganisms and can be achieved in two ways:

- i. Wash hands using soap and water using the 6 stage technique and then apply two applications of 5ml alcohol hand rub/gel. Each application should be applied using the 6 stage technique (Appendix 9) and allowed to dry
- ii. Wash hands using the 6 stage technique with an antiseptic hand scrub

solution. Lather well and wash all surfaces of the hands and wrists for 2 minutes, before rinsing and drying with paper towels.

### **Reusable towels must not be used.**

If the hands of the operator are not visibly dirty, alcohol hand rubs or equivalent may be used between cases. However, surgical hand disinfection/scrub is indicated at the start i.e. before the first case or procedure

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

PPE is worn by those carrying out minor surgical procedures to protect themselves and the service user from infection. A new disposable plastic apron and sterile gloves are the minimum PPE required for minor procedures and must be changed between cases. After use protective clothing should be disposed of as clinical waste.

However, full precautions, including a sterile gown, are required if a sterile device is being implanted, or if there are other factors predisposing to infection.

Masks are not usually required except when a sterile device is being implanted or there are other issues predisposing to infection. However, visors/face protection should be worn by care workers if splashing is likely.

### **Aseptic Technique**

All operators whether surgically trained or not must be assessed as competent in aseptic procedures and in the knowledge and understanding of the facilities that are provided.

### **Pre-operative skin preparation**

Operation skin sites should be disinfected prior to surgery. The aim is to remove transient bacteria and reduce the number of resident bacteria. The preparation used should be fast acting and have a prolonged antibacterial effect. Antiseptic preparations that are suitable and most frequently used are those containing chlorhexidine gluconate or povidone-iodine in either an aqueous or alcohol base. Skin reactions may occur with some products.

The solution should be liberally applied to the operation site and surrounding area and then allowed to dry. Skin disinfection should be carried out immediately prior to surgery.

Hair removal is not always necessary and should be avoided. If required use a depilatory cream or electric clippers rather than a razor to avoid trauma to the skin which increases the risk of post-operative infection.

### **Surgical instruments.**

There are rigorous national and local requirements in place for the decontamination of surgical instruments which are difficult to comply with outside a specialist Central Sterile Services Unit (CSSU). For this reason local reprocessing of surgical instruments should not take place in general practice.

In primary care settings all surgical instruments must be managed in either one or a combination of the following:

- Single use sterile instruments (this is the preferred method)
- Single use sterile instruments supplied by or sterilised by Central Sterile Services Unit that complies with the Medical Devices Directive (MDD) 93/42 EEC and is registered with an MHRA approved notified body to

provide services for a third party.

If reusable instruments are supplied by a CSSU they must be handled safely after use. All sharps and tissue should be removed. The used instruments should be wrapped in the original packaging and stored in clearly identifiable, secure, leak proof, lidded container whilst awaiting collection.

Instruments should not be washed prior to return to a CSSU.

Where instruments are supplied by a CSSU the traceability system employed by the CSSU should be used for example, packs supplied usually have a two part label with identical bar codes on each part. One bar code stays with the pack and the other bar code should be placed in the service users notes. This allows total traceability of the pack which is one of the DOH requirements for decontamination.

### **Organisation and work flow**

In the clinical area work flows should be from clean to dirty areas, with clean and dirty procedures clearly defined. The areas should be arranged to reduce the risk of cross contamination. Ideally “clean’ and “dirty’ activities should be carried out in separate rooms.

### **Cleaning the environment and general equipment**

Cleaning must be undertaken at frequencies that prevent build-up of dust, dirt and debris. The frequency may range from after each use, daily to weekly depending upon the nature and volume of work undertaken in the room.

Cleaning with general purpose detergent, warm water and disposable paper or cloths will be suitable for most surfaces. Detergent wipes may be used for equipment where use of water could be hazardous.

Equipment and surfaces that have been contaminated with splashes of blood or body fluids may need to be disinfected with a hypochlorite (bleach) solution after cleaning.

The cleaning schedule should outline the items to be cleaned, the frequency and the method.

More information on cleaning the environment and equipment can be found in Section 15.

### **Clinical waste**

Clinical waste should be placed in a foot operated waste bin. Clinical waste bags should be removed at the end of each session/day and placed in a secure designated holding area for clinical waste that complies with the latest guidelines.

A separate secure area, inside or outside the operative facility, e.g. a lockable bin, should be provided. Further information can be found in OCCG Core Policy 6, Waste Management.

**Records** must be maintained using an operations register, both for audit purposes and as a safeguard for medico-legal reasons. It should include details of the date and time of operation, Service user’s name and address, names of surgeon, procedure performed, if local anaesthetic was administered, name of assistant and whether histology or other specimens were sent.

## **13. STORAGE AND HANDLING OF VACCINES**

**Refer to OCCG IPC Core Policy 3; Cold Chain Procedure**

### **13.1 Administration of vaccines**

- Vaccines should not be prepared in advance of an immunization session as this increases the risk of administering the wrong vaccine and may affect the temperature.
- Reconstituted vaccine must be used according to the manufacturer's recommendations, usually within 1-4 hours.
- Vaccines should only be removed from the fridge for the minimum length of time before administration and any opened in error must be discarded.
- Oral polio vaccine (OPV) should not be allowed to remain at room temperature awaiting or following an immunisation as this may decrease the potency of the vaccine.
- Multi-dose vials may be used for one session only. Any remaining vaccine must be discarded at the end of the session

#### **Skin Preparation**

If the skin is socially clean, it is not necessary to disinfect the skin prior to injection. Soap and water is adequate otherwise. If spirit swabs are used ensure the alcohol has evaporated and the skin is dry before administering the vaccine. Some live vaccines may be inactivated by alcohol.

### **13.2 Disposal of vaccines**

At the end of a vaccination or immunisation session any prepared or opened vaccines must be destroyed. Place the vaccines in a sharps box, for incineration. Expired vaccines must also be disposed of in a sharps box.

### **13.3 Immunisation training**

National standards and a core curriculum have been developed for immunisation training courses. All care workers involved with distribution, handling, storage and administration of vaccines should have received appropriate training.

## **14. SPECIMEN COLLECTION, HANDLING AND TRANSPORT**

Specimens are an important element in care, providing information both for diagnosis and treatment. Clinical specimens include any substance, solid or liquid, removed from the service user for the purpose of analysis. It is important that care workers are trained to handle specimens safely and have appropriate immunisation cover which is regularly updated.

All staff managing specimens are responsible for ensuring that the information supplied is

- Legible
  - Logical
  - Accurate
- Includes all the necessary information
  - Complies with the requirements of information governance.

The care worker taking the specimen should provide the service user with an explanation of why the specimen is being taken.

#### 14.1 Specimen collection (for microbiological investigations)

**Specimens for microbiological investigations must only be taken if there are signs and symptoms of clinical infection.** Bear in mind, for example, that any wound will be colonised with many organisms, and if swabbed in the absence of clinical infection, the culture result may lead to unnecessary treatment with antibiotics.

The signs and symptoms of infection vary depending upon the nature of the infection, but include:

**Wound infection** - cellulitis, pain, redness, pus, fever.

**Chest infection** - fever, cough, sputum that may contain pus or blood.

**Urinary infection** - fever, pain on passing urine, blood or pus in urine, offensive odour, malaise.

**Eye infection** - redness, pain on moving the eyelid, discharge.

**Enteric (gut) infection** - diarrhoea, vomiting, abdominal pain, fever, blood or mucous in faeces.

The aim when collecting a microbiology specimen is to collect an adequate amount of tissue/fluid, uncontaminated by microorganisms from any outside source, but preserving any microorganisms that may be present. When obtaining specimens for microbiological investigation it is important to:-

Use the appropriate container; if unsure, check with the laboratory at your local hospital.

Label the specimen container with the service user's details and date **prior** to collection.

Wash hands before and after taking the specimen.

Collect an adequate amount in order to increase the possibility of detecting the microorganism. Where pus is present a sample of pus is preferable to a swab.

Moisten the bacteriology swab used for dry wounds/surfaces with sterile water or saline to allow for optimum pick-up of microorganisms.

Ensure that the specimen is not contaminated during collection, either by equipment or an individual's normal flora (the normal skin bacteria).

Obtain specimens prior to the commencement of antibiotic therapy.  
If therapy has already commenced, specify the antibiotic on the request form.

Complete all details on the laboratory request form in legible hand writing or

electronically and include:-

- Details of the service user (name, DOB and NHS number);
- GP name and number
- Details of sample sent, including the site from which the sample was taken if the sample is a wound swab;
- Nature of the signs and symptoms;
- Date (and time if appropriate) of specimen;
- Duration of illness;
- Tests required.
- Recent antibiotic therapy or travel history;
- Whether the case is part of a cluster or outbreak of similar cases;
- Biohazard/danger of Infection label;
- Signature of the person requesting the specimen;

The service user's details must be entered on both the container and the request form, the container placed in a plastic transport bag and the accompanying request form put into a separate pouch provided.

## **14.2 Handling and storage of specimens**

Non-sterile gloves should be worn for handling specimen containers especially those brought in by service users.

Specimens must be in appropriate, robust leak proof containers.

The specimen container should be in a separate pouch to the request card.

The outside of the specimen container should be clean and free from contamination.

Where the sample is known or suspected to be high risk a bio hazard or "danger of infection" label must be attached to both the specimen and the request form.

Hands should be washed after handling specimens and there should be a hand wash basin adjacent to the specimen reception area.

There should be a spillage kit in specimen reception area.

Specimens must be stored away from food, drink and drugs to prevent cross contamination.

Specimens awaiting collection should be stored in a clean, leak proof lidded container which is washed daily with general purpose detergent and warm water, rinsed and dried.

## **14.3 Transport**

Send specimens to the laboratory as soon as possible after collection in order to prevent overgrowth of non-pathogens and the death of pathogenic micro organisms.

The specimen transport carrier used for carrying specimens to the GP/hospital pathology laboratories must be secure and conform to guidelines set out in the Health and Safety at Work Act (1974).

Other regulations that apply are the Carriage of Dangerous Goods (Classification, Packaging and Labelling) and the use of Transportable Pressure Receptacles Regulations 1996.

## **14.4 Disposal of Specimens**

All specimens are clinical waste and must be disposed of safely.

Urine specimens tested in the practice should be disposed of via a sluice facility

or if this is not available a toilet may be used.  
Specimens **MUST** not be disposed of via a hand wash sink.

#### **14.5 Further Information**

More detailed information on the collection of specimens can be obtained from the laboratory handbooks on the OUHFT website at [www.ouh.nhs.uk](http://www.ouh.nhs.uk)

## **15. CLEANING THE ENVIRONMENT**

### **15.1 General**

The practice environment should be visibly clean, free from dust and debris to be acceptable to service users, care workers and visitors. Regular and efficient cleaning is necessary to maintain the appearance and function of the premises.

In general, it is considered that the environment has a relatively low role in the transmission of infection however the environment is known to play an important role in cross infection during outbreaks.

In treatment rooms used for clinical procedures and minor surgery accumulations of dust, dirt and liquid residues will increase infection risks and must be reduced to the minimum. This can be achieved by regular cleaning and by using good design features in buildings, fittings and fixtures.

A good standard of cleaning will control the microbial population and prevent the transfer of potentially infectious material. It is important that the chosen method of cleaning should remove the contamination, and not merely redistribute it.

An audit programme for monitoring the standard of hygiene should be in place in all health care premises.

### **15.2 Floors and other hard surfaces**

Hard floors should be durable, of good quality, washable and smooth-finished with welded seams. They should be intact, impervious to fluids and should not allow the pooling of liquids.

Carpets are not recommended in treatment rooms or other clinical areas. If carpets are provided (in non-clinical areas) there should be procedures or contracts in place for regular cleaning and for dealing with spillage.

Generally, for hard surfaces wet cleaning methods are preferable to dry ones, as with dry methods there is risk of dispersal into the air of microorganisms. Moist surfaces encourage bacterial growth, and thorough drying is part of the cleaning process. Impervious flooring should be washed using a neutral general purpose detergent and a mop with a detachable head that can be laundered. Mop heads used should be changed daily and laundered. Mop buckets must be washed daily after use, and stored clean, dry and inverted.

If dry dusting of floors is carried out it must be with a dust attractant mop to ensure no dispersal of dust and microorganisms.

Vacuum cleaning (with filters) is suitable for carpets and other soft furnishings.

Work surfaces should be smooth-finished, intact, washable, durable and impervious to fluids. Cleaning with neutral general purpose detergent and hot water remains the most effective method of removing contamination including microorganisms, and therefore damp dusting with disposable paper towels/cloths should be the norm for all hard surfaces. Do not use refillable spray cleaners as they provide a breeding ground for microorganisms.

### **15.3 Curtains, blinds and soft furnishings**

Curtains should be laundered or cleaned when soiled or periodically (e.g. six monthly) and an adequate supply of curtains purchased to facilitate this.

Blinds/screens should be of a type that can be wiped clean.

Upholstered furniture should be covered in impermeable fabrics that can be wiped clean.

Pillows if used, should be in sealed plastic covers that can be wiped clean. If the covers are damaged the items should be replaced.

#### 15.4 Cleaning equipment and materials

Disposable, non-shedding cloths or paper roll should be provided for cleaning purposes. Equipment and materials used for general cleaning should be kept separate from those used for the cleaning of body fluid spillage. Fresh cleaning solutions should be used and changed for each room. Do not leave cloths or mops stored in disinfectants or buckets.

There has been an increase in the use of micro fibre cleaning systems in health care settings. These systems reduce the time required for cleaning and minimise the use of detergents and other cleaning products. Guidance and advice should be sought from the suppliers/manufacturers for exact use.

Cream cleanser or a hard surface cleaner is usually suitable for cleaning hand washbasins and general-purpose detergent is recommended for other environmental cleaning. Follow manufacturer's instructions. Disinfectant/detergent wipes can be used for equipment or surfaces, these types of wipe facilitate easy cleaning. A COSHH assessment is required for any cleaning materials used.

The following table shows examples of cleaning and disinfectant products:

**Table 6 Example cleaning products and disinfectants**

| Products  | Examples of Products                                   | Use   |
|---|--|---|
| Neutral general purpose detergent   | Hospec<br>Fairy  | Routine cleaning of equipment and environmental surfaces,                                     |
| Disinfectant/Detergent wipes  | Clinell  | Routine cleaning of equipment and environmental surfaces ,                                    |
| Cream cleanser  | Cif  | Stubborn marks or stains in sanitary or kitchen areas   |
| Chlorine releasing agents:-<br>Sodium Hypochlorite (NaClO)<br><br>Sodium dichloroisocyanurate (NaDCC) | Milton /Domestos<br><br>Presept /haz tabs<br>Sanichlor | For blood spillage on hard surfaces DO NOT USE ON URINE SPILLS the fumes released are harmful |

#### 15.5 Colour Coding

Colour coding of cleaning equipment has been adopted in many NHS settings, and practices may wish to consider adopting this. It is especially useful when care workers work across other care providers both in the independent care sector and in the NHS.

All cleaning items, for example, cloths (re-usable and disposable), mops, buckets, aprons and gloves, should be colour coded as outlined in the table below.

### Colour coding system

|   |  |
|---|--|
| <b>Red</b><br>Sanitary areas including<br>sinks in sanitary areas | <b>Blue</b><br>General areas, e.g. waiting<br>rooms and consulting rooms<br>(including sinks in general areas) |
| <b>Green</b><br>Kitchens  | <b>Yellow</b><br>Treatment and minor<br>operation rooms  |

### 15.6 Cleaning Schedules

A written cleaning schedule should be devised, based on a risk assessment, which includes the management of spillage of body fluids and regular removal of dust by damp dusting high and low horizontal surfaces. This should specify those persons responsible for cleaning (especially in the cleaner's absence), the frequency of cleaning and methods used and the expected outcomes.

For suggested methods and frequencies of cleaning the environment and equipment, refer to cleaning schedules in Appendix 8.

### 15.7 Management of the spillage of blood and body fluids

#### Spillage of high risk body fluids

Spillages of blood and high-risk body fluids must be dealt with quickly and effectively. Disposable gloves and an apron must be worn for cleaning body fluid spillage and

the contaminated debris treated as clinical waste.

Chlorine-releasing agents can be a hazard especially if used in large volumes, in confined spaces or mixed with other chemicals or urine. Protective clothing must be worn and the area well ventilated.

A risk assessment and COSHH assessment must be carried out for dealing with these spillages both in terms of the chemicals used and the likelihood of infection. Following a risk assessment and depending upon the products available, spillage may be dealt with by any of the following methods.

Commercial companies produce spillage kits with instructions that would be useful in areas such as specimen reception.

### **Sodium dichloroisocyanurate (NaDCC) method (not carpets and soft furnishings) using sanitising powder or granules**

Wearing protective clothing, cover spillage with NaDCC granules.  
Leave for at least two minutes.

Scoop up the debris with paper towels and/or cardboard. Wash the area with detergent and water and dry thoroughly. Dispose of all materials as per clinical waste. Clean the bucket/bowl with fresh soapy water and dry.

Discard protective clothing and wash hands.

### **Hypochlorite (Milton or bleach) method (not carpets and soft furnishings)**

Wearing protective clothing, soak up excess fluid using disposable paper towels. Remove organic matter using the towels and discard as clinical waste.

Clean area with detergent and water and disinfect the area with towels which have been soaked in 10,000 (Milton undiluted) parts per million of available chlorine (e.g. Milton or Haz Tabs) and leave for at least two minutes and then rinse and dry thoroughly.

Clean the bucket/bowl in fresh soapy water and dry.  
Discard protective clothing and wash hands.

### **Detergent and water method (for soft furnishings and carpet)**

Steam clean **or**

Wearing protective clothing mop up organic matter with paper towels or disposable cloths.

Clean surface thoroughly using a solution of detergent and water and paper towels or disposable cloths.

Rinse the surface and dry thoroughly.  
Dispose of materials as clinical waste.

Clean the bucket/bowl in fresh hot, soapy water and dry.  
Discard protective clothing and wash hands.

### **Spillage of low-risk body fluids (urine, faeces, vomit etc)**

Wearing protective clothing mop up organic matter with paper towels or disposable cloths.

Clean surface thoroughly using a solution of detergent and water and paper towels or disposable cloths.

Rinse the surface and dry thoroughly.

During outbreaks of viral gastroenteritis disinfect surfaces using 1000 ppm (1 part Milton to 10 parts water or bleach 1 part bleach to 100 parts water) chlorine solution after cleaning.

Dispose of materials as outlined in OCCG IPC Core Policy 6, Waste management.

Clean the bucket/bowl in fresh hot, soapy water and dry.

Discard protective clothing and wash hands.

## 15.8 Deep cleaning

### What is deep cleaning?

Deep cleaning is not routine environmental cleaning that is undertaken daily within the care environment but is additional cleaning that should be undertaken in special circumstances. In care facilities providing residential care such as hospitals and care homes this would be:-

- Following outbreaks and would involve cleaning - **the whole environment**.
- Post discharge, transfer or death of individual service user – **single room and en suite**.
- When isolation of a service user with a known infection is no longer required – **single room and any associated bathroom facility**
- Following refurbishment and building work. Periodic cleans to thoroughly clean the environment. The frequency will depend on the type of room and its use.

The last two of these categories are the ones that would apply to general practices.

The terminology **single room and any associated bathroom facility** refers to where a patient has to be isolated away from the waiting areas in the practice. At times they may have to use the bathroom, in cases of active and explosive diarrhoea and vomiting. In this scenario the patient should be allocated a single toilet facility where possible and this should be deep cleaned once the patient has left the practice

Each practice should have a written cleaning schedule for both routine and deep cleaning that ensures that all areas of the premises are cleaned to a satisfactory standard.

**Deep cleaning** is the thorough cleaning of all surfaces, floors and soft furnishings and reusable equipment.

This will include:

Skirting boards, picture and dado rails;  
Window sills and frames;  
All ledges, shelving and storage cupboards.  
All horizontal surfaces;  
Soft furnishings including curtains and blinds;  
Curtain rails and tracks;  
Floors and carpets ;  
Light fittings and lamp shades;  
Equipment;  
Furniture and fittings;  
Radiators;  
Sinks, toilets, baths and showers plus taps, flush and door handles;  
Soap and towel dispensers.

Deep cleaning is essential to ensure that a safe environment is maintained for service

users, care workers and others by minimising the risk of cross contamination.

### **What equipment is required for deep cleaning?**

Care workers and housekeeping staff that are carrying out deep cleaning should wear disposable plastic aprons and household or disposable gloves.

The routine use of disinfectants is not recommended. The physical removal of dirt and microorganisms by wiping or scrubbing is more important than the type of cleaning agent used.

Deep cleaning should be undertaken using:

- Clean bucket;
- Clean hot water and general purpose detergent;
- Disposable cloths;
- Floor mop with disposable or washable mop head;
- Vacuum cleaner fitted with a HEPA filter;
- Steam cleaner or carpet shampooer.

### **Deep cleaning procedure**

Wear personal protective clothing (at least disposable gloves and apron).

Water and detergent solutions, disposable cloths and mop heads used for cleaning should be changed for each episode of cleaning when moving from one environment to another (room to room) and when the water is visibly dirty or contaminated.

Remove/dispose of unwanted items.

Take down curtains and send to the laundry.

Clean, all furniture and fittings

The „Golden Rule „for cleaning is to work from the cleanest to the dirtiest areas starting at the higher levels and working down.

Curtains should be laundered.

Carpets should be vacuumed (vacuum cleaners should be fitted with a HEPA filter) and then steam cleaned or shampooed.

Discard waste and clean waste bin.

Clean all cleaning equipment and leave to dry.

Wash hands.

Restock room with clean supplies.

### **15.9 Key points when cleaning:**

Wear protective clothing, i.e. apron and gloves;

Prepare a fresh cleaning solution appropriately diluted for each task;

Make up only the quantity required in a clean container;

Some cleaning products are incompatible; only mix if advised by manufacturer;  
Change the solution frequently to prevent a build-up of soil or microorganisms which would recontaminate surfaces;

Dispose of cleaning solution promptly in a sluice or dirty utility area;

Ensure that equipment is stored clean, dry and in the designated place;

Remove protective clothing and wash hands before carrying out other duties;

Do not use disinfectants routinely.



## 16. DECONTAMINATION OF CARE EQUIPMENT AND MEDICAL DEVICES

### 16.1 Good practice

All equipment must be clean, fit for purpose, and in a good state of repair; All equipment must be stored in an appropriate area;

If there are items of equipment that are not routinely cleaned on a daily basis, there should be a written cleaning schedule and records kept of cleaning undertaken.

Most general equipment can be cleaned safely using warm water and general purpose detergent.

Chemical disinfection using chlorine based disinfectants may be used following cleaning if items have been contaminated with blood and high risk body fluids.

All reusable medical devices that need to be sterile at the point of use should be supplied as single use disposable items or supplied by an accredited CSSU.

### 16.2 Purchase of equipment

Before purchasing any new equipment, it is important to know how it can be decontaminated. Manufacturers should be able to provide written instructions on this and equipment should only be purchased if appropriate decontamination facilities are available.

### 16.3 Methods of Decontamination

Equipment can be categorised according to the risk of infection it poses to the service user. The choice of process depends on a number of factors:-

- The type of equipment;
- The organisms involved;
- The time available for decontamination;
- The risk to service users and care workers.

Table 7 summarises the decontamination processes that should be used based on risk.

Items that are not in direct contact with the service user or in contact with intact skin are classed as **low risk** and should be cleaned.

Items in contact with mucous membranes (eyes, mouth or rectum) are classed as **medium risk** and should be single use or cleaned and disinfected (or sterilised) between uses.

Items that enter the body or have contact with broken skin, broken mucous membranes or with the vagina are classed as **high risk** and must be single use or cleaned and sterilised

**Table 7 Risk assessment for decontamination of equipment**

| <b>Risk</b> | <b>Application of Item</b>  | <b>Recommended Method</b>   | <b>Examples</b>   |
|-------------|---|---|---|
| Low         | Items not in direct contact with service user or in contact with healthy skin.  | Cleaning with general purpose detergent or detergent/disinfectant wipe and allowing to Dry.                             | Floors and ceilings, walls, surfaces, examination couches, trolleys, toilets, wash hand basins, furniture and fittings. |
| Medium      | Items in contact with mucous membranes or contaminated with virulent or readily transmissible micro organisms (body fluids) or prior to use on immunocompromised service users. | Single use items.<br>Clean item and then disinfect or sterilise (item does not need to be sterile at the point of use). | Suction catheters, aurasccopes, thermometers, ambubags , masks, respiratory equipment                                   |
| High        | Items in contact with a break in the skin or mucous membrane or for introduction into sterile body areas  | Sterilisation in a sterile services department or single use and use item sterile                                       | Surgical instruments, urinary catheters, dressings, needles   |

**(Adapted from the Medical Devices Agency 2005)**

## **Cleaning**

Thorough cleaning with general purpose detergent and warm water (body temperature) will remove large numbers of microorganisms from a surface. A further reduction in numbers occurs as the surface dries. A combined detergent/disinfectant wipe can also be used for this purpose. The type of organism involved also affects the cleaning method chosen. In cases where *C.difficile* is present a sporicidal wipe would be considered an effective method of cleaning.

Reusable medical devices cannot be effectively disinfected or sterilised without having first been thoroughly cleaned and dried. Cleaning will not be effective if surfaces are damaged or rusty.

An automated method such as a thermal washer/disinfector is the most effective method for cleaning reusable medical devices e.g. surgical instruments prior to sterilisation.

## **Manual cleaning**

Reusable surgical instruments and medical devices that require disinfection and sterilisation should not be cleaned manually they should be sent to a CSSU for reprocessing.

Manual cleaning is an acceptable method for cleaning the environment and low risk equipment e.g. If any manual cleaning is undertaken there must be a risk assessment and records of agreed procedures must be in place to ensure that a consistent method is employed by all care workers. There should be a deep sink designated for the purpose and PPE (disposable gloves, apron and eye and face protection) available.

## **How to clean care equipment.**

### **Detergent and water method:**

Clean the item in an area designated for cleaning.

Wear protective clothing, i.e., apron, gloves and eye and face protection.

Prepare a fresh cleaning solution appropriately diluted for each task.

Make up only the quantity required in a sink designated for cleaning equipment/not a hand wash sink.

Some cleaning products are incompatible; only mix if advised by manufacturer. Use warm water, a general purpose detergent and disposable cloths or disposable paper towels. It is not necessary to use cleaning products that contain disinfectants and other antibacterial agents.

Avoid generating splash by immersing the item where possible. If splash is unavoidable wear protective eyewear.

After cleaning, rinse and inspect the equipment. If the item remains soiled, repeat the cleaning process.

Change the solution frequently to prevent a build-up of soil or microorganisms which would recontaminate surfaces.

Ensure the item is dried as quickly as possible either using paper roll or by inverting to air-dry. Air drying is acceptable for large surfaces, but small areas should be dried with clean disposable paper towels/cloths.

Dispose of cleaning solution promptly in a sluice or dirty utility area.

Remove protective clothing and wash hands before carrying out other duties.

## **Wipes method:**

### **Pre-moistened wipes:**

Don disposable gloves, and aprons if suspected contact with blood or bodily fluids.

Remove wipe from packaging

Wipe item using disinfectant/detergent wipe

Allow to air dry.

Dispose of wipe into clinical waste

Dispose of gloves (and apron where applicable)

Decontaminate hands using soap and water

For items which have been in contact with patients with known or suspected *C.difficile*:

### **Dry –sporicidal wipes:**

Don disposable gloves, and aprons if suspected contact with blood or bodily fluids.

Remove wipe from packaging

Run dry wipe under warm water, squeeze out excess liquid

Wipe item using disinfectant/detergent wipe

Allow to air dry.

Dispose of wipe into clinical waste

Dispose of gloves (and apron where applicable)

Decontaminate hands using soap and water

## **Disinfection**

Disinfection is a process used to reduce the number of microorganisms to a level that is considered safe, but which may not necessarily destroy some viruses or bacterial spores. Disinfection is usually acceptable for devices that pose a medium risk of infection if these devices cannot be effectively sterilised. Disinfection can be achieved in a number of ways including the use of heat and chemical disinfectants. Both methods have their drawbacks and it is often safer and more convenient to use a single use disposable device instead.

Disinfection is a process additional to cleaning. It does not kill all microorganisms, but reduces their number to a level which is not harmful to health.

Disinfection is necessary when items:-

are contaminated by blood or body fluids, and/or come into contact with mucous membrane.

### **How to disinfect**

There are two common methods of disinfection; moist heat and chemical disinfection. Moist heat is used for example in CSSU for cleaning surgical instruments prior to sterilisation and in domestic items such as dishwashers and washing machines.

### **Moist heat disinfection**

Dishwashers, washing machines and washer-disinfectors are effective methods for

disinfecting equipment because they clean the item and then expose the items to hot water for the required time to achieve thermal disinfection.

- 65° C for 10 mins**
- 71° C for 3 mins**
- 80° C for 1 min**
- 90° C for 1 sec**

### **Washer-disinfectors**

Thermal washer-disinfectors physically clean devices and kill microorganisms by applying hot water at disinfection temperatures. They are used for cleaning instruments, bedpans and other devices. They must have a contract for planned preventive maintenance and must be cleaned and maintained in accordance with Health Technical Memorandum (HTM 2030).

### **Chemical disinfection**

Chemical disinfection is normally used for cleaning heat labile equipment such as flexible endoscopes and this must be carried out in a facility designed for that purpose.

Chemical disinfectants are also used to disinfect equipment and surfaces after contamination with blood and body fluids and during outbreaks. Chlorine preparations are recommended following blood spillage, during outbreaks.

### **Chlorine preparations**

There are two widely used chlorine releasing agents, suitable for use on equipment and environmental surfaces:

- NaDCC (sodium dichloroisocyanurate) –e.g. Presept or Haz-tabs.
- NaClO (sodium hypochlorite) –e.g. Milton or bleach.

NaDCC is available as tablets, granules or powders, and some also contain a compatible detergent. It is preferred to NaClO because it is:-

- Easier to prepare and store;
- Slightly more efficacious;
- Less damaging to surfaces.

Different concentrations are required in different circumstances, and it is usual to describe the required concentration in “parts per million”, abbreviated to “ppm”. See Table below.

Examples: Haz Tabs, Actichlor, Precept, Sanichlor, Milton

### **Dilution of NaDCC and NaClO**

|              | <b>Parts per million</b> | <b>NaDCC</b>                       | <b>NaClO</b>            |
|--------------|--------------------------|------------------------------------|-------------------------|
| Blood spills | 10,000ppm                | 2 x 5.0g tabs in 500mls water      | Milton 1% use undiluted |
| Environment  | 1,000ppm                 | 2 x 0.5g tabs in 500mls water      | Milton 1% diluted 1: 10 |
| Catering     | 125                      | 1 x 0.5g tabs in 2 litres of water | Milton 1% diluted 1:80  |

Chlorine releasing agents should be diluted with cold water. Once prepared, the solution should be used within 24 hours or discarded.

After disinfection the item/surface should be rinsed and then dried using a paper towel.

### **Sterilisation**

Sterilisation is a process used to remove and destroy all microorganisms.

It is recommended that sterile equipment should be obtained pre-sterilised from a manufacturer or via a Central Sterile Supplies Unit (CSSU).

In general practice when sterile or disinfected items are required single use disposable items are recommended.

## **16.4 Single use and single patient use items**

Items labelled as 'single-use' are intended by the manufacturer to be used once and discarded. The manufacturer considers that the item is not suitable for use on more than one occasion or that there is insufficient evidence to ensure that this would be safe (MHRA 2000).

Single-use items may alternatively be labelled as '**Do not re-use**' or as per international standards symbol for 'do not re-use', which is the figure 2 with a line drawn through it.



Certain devices, e.g., nebulisers, may be used a number of times by the same service user and are described as being appropriate for "single patient use". These items should be cleaned after each use by the service user following the manufacturer's instructions.

## 16.5 Decontamination of health care equipment prior to repair, service or investigation

Equipment that has been contaminated with blood and other body fluids, or exposed to service users with a known infectious disease, should not be sent to third parties without being correctly decontaminated first. If in doubt, contact the third party in advance. After decontamination and before dispatching the item it should be labelled with a declaration of its decontamination status that states the method of decontamination used, or reasons why this was not possible. (Medicines and Healthcare products Regulatory Authority-MHRA, 2003).

Some equipment cannot be effectively decontaminated without being dismantled by an engineer. In addition decontamination may sometimes remove evidence of a fault or hinder an investigation. In these situations the manufacturer, repair organisation or investigating body should be contacted for advice regarding packaging and transportation. A "decontamination status" label should be attached to the item, the certificate completed accordingly and the recipient advised on protective measures required

## 17. PEST CONTROL

Pests can be found in any property but with appropriate precautions will not pose a risk to service users and care workers.

Pests include:-

|                             |   |
|-----------------------------|---|
| <b>Insects</b>              | ants, flies, cockroaches, fleas, silverfish |
| <b>Rodents</b>              | rats and mice                               |
| <b>Birds</b>                | pigeons                                     |
| <b>Feral cats and foxes</b> |   |

Control measures include:-

- Fitting fly screens, bird netting and covering drains;
- Being alert for signs of infestation such as droppings, nests and chew marks; Storing food in pest proof containers.
- Inspecting storage areas regularly.
- Keeping storage areas clean and cleaning up any spillage promptly.
- Correct waste disposal.

If pests are a problem advice should be obtained from specialist pest control companies.

## 18. ADMISSION AND TRANSFER AND DISCHARGE OF SERVICE USERS

In order to minimise the risk of infection to other service users and care workers the infection status should be passed on to those providing further support and nursing or medical care. This is essential at the time of admission or transfer between care facilities to ensure the provision of optimum care and prevent further transmission of infection. Likewise when service users are discharged home from hospital details of infection status should be passed on to the primary care team.

## 19. ANTIMICROBIAL PRESCRIBING

Inappropriate use of antimicrobial agents has led to a significant increase in the numbers of antibiotic resistant microorganisms. In addition to this the use of broad spectrum antibiotics has increased the risk and spread of *Clostridium difficile* infection.

- All antimicrobial prescribing should be in accordance with OCCG's antimicrobial prescribing guidelines and where ever possible supported by
- microbiological evidence.
- Where the service user's condition or other factors warrant prescribing outside the guidelines advice should be taken from the Consultant Microbiologist.
- All antimicrobial prescribing should be reviewed and amended if appropriate
- when microbiology results are available.
- Antibiotics should only be prescribed when there is clinical evidence of bacterial
- infection.
- The reason for the prescription should be clearly documented in the service
- user's notes.
- Any long term prophylaxis should be discussed with the Consultant Microbiologist.

The OCCG antimicrobial prescribing guidelines for adults can be accessed via this link:

<http://occg.oxnet.nhs.uk/GeneralPractice/ClinicalGuidelines/Infectious%20Diseases/Antimicrobials/Oxfordshire%20Antimicrobial%20ADULT%20Guidelines%20Primary%20Care%20January%202016%20v2.3.pdf>

The OCCG antimicrobial prescribing guidelines for paediatrics can be accessed via this link:

<http://occg.oxnet.nhs.uk/GeneralPractice/ClinicalGuidelines/Infectious%20Diseases/Antimicrobials/Oxfordshire%20Antimicrobial%20PAEDIATRIC%20Guidelines%20Primary%20Care%20v1.1%20May%202014.pdf>

**20. UNIFORMS AND WORKWEAR**

Not all care workers are required to wear uniforms. Uniforms are not considered to be a significant source of infection but the way care workers dress will convey certain messages to the service users they care for and the public. Both infection prevention and control and public perception should underpin the organisation’s uniform and dress code.

Examples of good and poor practice are shown in the following table

**Table 12 Examples of good and poor practice for uniform/dress code**

| Good Practice   | Poor practice  |
|---|--|
| Wear short sleeves when providing care to enable good hand hygiene.   | Go shopping and other public places whilst wearing uniform   |
| <p>Change into and out of uniform at work or cover uniform when travelling to and from work.</p> <p>Wear clear name badges so that service users know who is caring for them.</p> <p>Change immediately if uniforms become visibly soiled or contaminated.</p> <p>Tie long hair back.</p> <p>Wear soft soled closed toed shoes to protect feet from sharps and spills</p> <p>Wear clothes that are machine washable</p> | <p>Wear false nails when giving care as these can harbour microorganisms damage service users and prevent good hand hygiene</p> <p>Wear hand or wrist jewellery /wristwatches</p> <p>Wear numerous badges</p> <p>Wear neck ties other than bow ties for direct care</p> <p>Carry pens, scissors etc outside breast pockets</p> |
|   |  |

Uniforms do not constitute protective clothing and should always be protected from contamination by the use of disposable aprons.

Care workers should have sufficient uniforms to wear a clean uniform each day. Ideally they should be made of a fabric that is able to withstand a wash temperature of 60°C.

If care workers wear their own clothes in the workplace similar hygiene measures should be followed.

## 21. NEW BUILD AND SERVICE DEVELOPMENTS:

Department of Health guidelines have emphasised the role of the environment as a potential source of infection for service users. Therefore it is important that infection prevention and control principles and issues are considered whenever planning new or upgraded buildings. Designers, engineers, architects, facilities managers and planners must collaborate with the local infection prevention and control team to ensure that infection risks are reduced to a minimum. The infection prevention and control team should be consulted during the planning process in order to identify and minimise infection risks. This principle also applies when planning service developments and new contracts.

### Key considerations include:

- Size of rooms;
- Availability of treatment rooms;
- Availability and design of clinical hand wash basins; Design and features of ancillary areas;
- Engineering services;
- Storage facilities;
- Finishes for walls, floors, ceilings, doors, windows, fixtures, fittings and furniture; Interior design and designs of fixtures and fittings;
- Decontamination facilities; Kitchen and rest rooms;
- Waste – segregation, storage and disposal;
- Changing facilities;
- Service lifts
- Construction and the role of cleaning.

Further information on all these aspects may be found in the following publications:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/148509/HBN\\_11-01\\_Final.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/148509/HBN_11-01_Final.pdf)

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/170705/HBN\\_00-09\\_infection\\_control.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/170705/HBN_00-09_infection_control.pdf)

## 22. BIBLIOGRAPHY PAGES 74 – 97 THE HEALTH AND SOCIAL CARE ACT 2008

The following bibliography, which can be accessed via this link

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/449049/Code\\_of\\_practice\\_280715\\_acc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/449049/Code_of_practice_280715_acc.pdf)

is that of the Health and Social Care Act 2008. It has provided information and evidence to support this guideline and represents current guidance, best practice and legislation that sets the standard of care that should be applied in the prevention and control of infection in both health and social care.

# APPENDICES

## APPENDIX 1

### **Role Specification for an Infection Prevention and Control Link/Liaison Person**

#### **Role profile**

The role of the Infection Prevention and Control Link Person (IPCLP) is to act as a resource in their organisation and to liaise with the OCCG Infection Prevention and Control Nurse (OCCG IPCN). They promote best practice in the prevention and control of infection by being an informed resource and role model for colleagues. They are not seen as a substitute for adequately resourced infection prevention and control service.

#### **Summary**

To help create and maintain an environment which will ensure the safety of the service users, care workers and others by using infection prevention and control knowledge, communication, clinical, nursing and teaching skills.

#### **Qualifications**

They should be a qualified nurse at a senior level, a practice manager or a general practitioner within the organisation with the authority to enable them to implement changes in practice to improve infection prevention and control. They should have completed additional training in infection prevention and control either an accredited Infection prevention and control course or training approved/provided by the local Infection Prevention and Control Nurse Specialists/Practitioners.

#### **Responsibilities**

1. To liaise between their clinical area and the OCCG IPCN.
2. To be directly responsible for liaising with the OCCG IPCN with regard to the working of infection prevention and control policies and procedures in their organisation.
3. To liaise with the person in charge of the organisation and the OCCG IPCN with regard to the implementation of infection prevention and control policies and procedures.
4. To provide information for care workers concerning infection prevention and control related problems.
5. To assist in the education of new and existing care workers in the principles of infection prevention and control as it relates to their organisation.
6. To carry out infection prevention and control audits and feedback results to the management team and highlight any problems that need to be discussed with the OCCG IPCN.
7. To participate in the writing, reviewing, updating and auditing of infection prevention and control procedures and standards in relation to the practice.
8. To inform the OCCG IPCN of any alert organisms/conditions/outbreaks to ensure appropriate infection prevention and control precautions are implemented and to ensure that there are mechanisms in place to ensure this happens in their absence.

9. To provide teaching for care workers on infection prevention and control.
10. To be knowledgeable regarding the purchase/introduction and use of equipment in their clinical area in relation to:-
  - a) Infection prevention and control hazards;
  - b) Care and maintenance;
  - c) Decontamination and storage.

**Professional responsibilities**

- 1 To take every opportunity to update and extend his/her knowledge of infection prevention and control.
- 2 To meet agreed objectives

Infection Prevention and Control Link Person Objectives:

|   | Objective  | Date Completed and Comments |
|---|--|-----------------------------|
| 1 | Update infection prevention and control knowledge  |                             |
| 2 | Agree with the practice manager how infection prevention and control training and audit are to be implemented.   |                             |
| 3 | Ensure all care workers attend infection prevention and control training on appointment and annually.<br>Document attendance and retain records.   |                             |
| 4 | Train all care workers in hand hygiene, including correct hand washing technique and appropriate use of alcohol hand rub at least annually.  |                             |
| 5 | Complete:<br>Essential Steps self-assessment<br>Review self-assessment monthly with practice manager<br>Audit IC practice at least annually  |                             |
| 6 | Record audit scores, action any non-compliance and highlight problems to practice manager and OCCG infection control lead if necessary.<br><br>Discuss results with the management team. |                             |
| 7 | All new care workers must have infection prevention and control training included in their induction programme   |                             |

## APPENDIX 2

### Infection Control Audit Tool – General Practices (Adapted from the ICNA Audit Tools 2005)

The tool is broken down into four sections:

- 1 **Management and organisation**
- 2 **General environment and equipment**
  - 2.1 **General environment and equipment**
  - 2.2 **Dirty utility**
  - 2.3 **Domestics Room**
  - 2.4 **Staff kitchens/rest room**
- 3 **Infection Control Practices**
  - 3.1 **Hand hygiene**
  - 3.2 **To 3.9 can be accessed via Personal protective equipment**
  - 3.3 **Spillages**
  - 3.4 **Disposal of waste**
  - 3.5 **Handling of sharps**
  - 3.6 **Specimen handling**
  - 3.7 **Vaccine handling and storage**
  - 3.9 **Decontamination and disinfection**
- 4 **Clinical procedures**
  - 4.1 **Aseptic procedures**

**Scoring:** All the criteria should be marked either yes/no or non- applicable. It is not acceptable to enter a non – applicable response where an improvement in a standard may be achieved.

Add the total number of yes answers and divide by the total number of questions answered (all the yes and no answers) excluding the non applicable, multiply by 100 to get the percentage

$$\frac{\text{total number of yes answers}}{\text{total number of yes and no responses}} \times 100 = \%$$

#### Compliance Levels:

|               |                    |   |
|---------------|--------------------|---|
| 85% and above | Compliant          |  |
| 76 – 84%      | Partial compliance |  |
| 75% or less   | Minimal compliance |  |

## INFECTION CONTROL AUDIT TOOLS

Audit tools

General Practices

Date: .....Practice.....

Auditors... ..

### Section 1 – Management and organisation

Standard Statement: There are management structures in place to ensure that all staff throughout the organisation are engaged to promote and secure the implementation of best practice in the prevention and control of infection

|    |   | Yes | No | N/A | Evidence/Comments |
|----|---|-----|----|-----|-------------------|
| 1  | The Registered Provider and Management Team accept responsibility for infection Prevention and control.   |     |    |     |                   |
| 2  | There is a designated lead for infection control within the practice.   |     |    |     |                   |
| 3  | The designated lead has received appropriate training in infection control  |     |    |     |                   |
| 4  | Care workers are aware of where to obtain 24 hour infection control advice  |     |    |     |                   |
| 5  | There are policies/procedures in place for infection prevention and control that are endorsed by local infection prevention and control specialists |     |    |     |                   |
| 6  | Policies are reviewed and updated every two years in line with new evidence and Guidance  |     |    |     |                   |
| 7  | Roles and responsibilities for infection control are outlined in the infection control Policy   |     |    |     |                   |
| 8  | There are structures in place to ensure distribution, compliance and monitoring of infection prevention and control policies to all care workers.   |     |    |     |                   |
| 9  | There is an annual programme of audit of infection control policies and procedures  |     |    |     |                   |
| 10 | Infection control policy is accessible to all care workers  |     |    |     |                   |
| 11 | Care workers are aware of the content of the policy   |     |    |     |                   |
| 12 | GPs are aware of the notification procedure for notifiable diseases   |     |    |     |                   |
| 13 | Infection control is included in induction programmes for all new staff   |     |    |     |                   |
| 14 | All care workers receive annual infection control training  |     |    |     |                   |
| 15 | Records of all infection control training kept  |     |    |     |                   |
| 16 | Infection control is included in care workers job descriptions  |     |    |     |                   |
| 17 | Infection control is included in care workers Appraisals  |     |    |     |                   |
| 18 | Infection control issues are taken into consideration at the planning and design stage of refurbishment /new build                                  |     |    |     |                   |

|    |                                       | Yes | No | N/A | Evidence/Comments |
|----|---------------------------------------|-----|----|-----|-------------------|
| 19 | Infection control advice is sought as |     |    |     |                   |

|           |   |  |  |  |
|-----------|---|--|--|--|
|           | necessary for services that have            |  |  |  |
|           | implications for infection control (laundry |  |  |  |
|           | and waste)                                  |  |  |  |
|           | Totals                                      |  |  |  |
| Comments: |   |  |  |  |

Total number of yes answers

Potential total (Number of Yes and Nos)

Percentage

Status

Review Date

## Section 2 – Environment and equipment

Standard Statement: The environment and equipment will be managed appropriately to reduce the risk of cross infection

| 2.1 | General environment and equipment  | Yes | No | N/A | Comments |
|-----|--|-----|----|-----|----------|
| 1   | The organisation has access to NHS document Infection Control in the Built Environment.  |     |    |     |          |
| 2   | The organisation has comprehensive procedures for cleaning based on up to date guidance/best practice (NPSA 2009).                               |     |    |     |          |
| 3   | Organisational structures are in place to ensure compliance and auditing of Cleanliness  |     |    |     |          |
| 4   | Overall appearance of the environment is tidy and uncluttered with only appropriate, clean and well maintained furniture used.                   |     |    |     |          |
| 5   | All high and low surfaces are free from dust and cobwebs   |     |    |     |          |
| 6   | All chairs and stools in clinical/communal areas are covered in an impermeable washable materials e.g. vinyl                                     |     |    |     |          |
| 7   | Furniture, fixtures and fittings are visibly clean (no body substances, dirt or dust) and in a good state of repair (surfaces and fabric intact) |     |    |     |          |
| 8   | There are rooms designated for clinical practice/minor surgery   |     |    |     |          |
| 9   | Rooms allocated for clinical practice are not carpeted   |     |    |     |          |
| 10  | Fabric of the environment and equipment smells clean , fresh and pleasant  |     |    |     |          |
| 11  | Floor coverings are washable and impervious to moisture and sealed Regularly   |     |    |     |          |
| 12  | Floors including edges and corners are free of dust and grit   |     |    |     |          |
| 13  | Curtains and blinds are free from stains, dust and cobwebs   |     |    |     |          |
| 14  | There is a procedure in place to regularly clean blinds/change curtains (minimum yearly)or when soiled   |     |    |     |          |
| 15  | Fans are clean and free from dust  |     |    |     |          |
| 16  | Air vents are clean and free from excessive dust   |     |    |     |          |
| 17  | Work station equipment in clinical areas are visibly clean e.g. phones, computer keyboards   |     |    |     |          |
| 18  | Furniture that cannot be cleaned is condemned  |     |    |     |          |
| 19  | Tables and surfaces are tidy and uncluttered to enable cleaning  |     |    |     |          |
| 20  | Couch covers are covered in impervious, material, clean and in a good state of repair  |     |    |     |          |
| 21  | Disposable paper is used to protect couches  |     |    |     |          |
| 22  | Where used pillows are sealed in wipe clean washable covers.   |     |    |     |          |
|     |  |     |    |     |          |
| 2.1 |  | Yes | No | N/A | Comments |

| <b>General environment and equipment (continued)</b> |  |  |  |  |  |
|--|--|--|--|--|--|
| <b>23</b>  | Water coolers are mains supplied, visibly cleaned and on a planned maintenance programme.                      |  |  |  |  |
| <b>24</b>  | Soft toys are not available for communal use   |  |  |  |  |
| <b>25</b>  | Toilets are visibly clean with no body substances, dust, lime scale stains or smears (check under toilet seat) |  |  |  |  |
| <b>26</b>  | Changing mats are wipe clean with wipe clean covers and free from stains                                       |  |  |  |  |
| <b>27</b>  | Baby weighing scales are visibly clean and lined with disposable paper   |  |  |  |  |
| <b>28</b>  | Comments   |  |  |  |  |
| <b>29</b>  | Total number of Yes answers  |  |  |  |  |
| <b>30</b>  | Potential total (all answers combined)   |  |  |  |  |
| <b>31</b>  | Percentage compliance:   |  |  |  |  |
|  |  |  |  |  |  |

| 2.2                                     | Dirty utility  | Yes | No          | N/A | Comments |
|---|--|-----|-------------|-----|----------|
| 1                                       | A dirty utility is available   |     |             |     |          |
| 2                                       | A separate sink is available for decontamination of service user Equipment |     |             |     |          |
| 3                                       | A sluice hopper is available for the disposal of body fluids               |     |             |     |          |
| 4                                       | The integrity of fixtures and fittings are Intact                          |     |             |     |          |
|   | Totals   |     |             |     |          |
| Comments:                               |  |     |             |     |          |
| Total number of yes answers             |  |     |             |     |          |
| Potential total (Number of Yes and Nos) |  |     |             |     |          |
| Percentage                              |  |     |             |     |          |
| Status                                  |  |     | Review Date |     |          |

| 2.3 | Domestic's room   | Yes | No | N/A | Comments |
|-----|---|-----|----|-----|----------|
|     | Separate hand washing facilities are available including soap and paper towels                    |     |    |     |          |
|     | Floors including edges and corners are free of dust and grit                                      |     |    |     |          |
|     | Equipment used by the domestic care workers is clean, well maintained and stored in a locked area |     |    |     |          |
|     | Vacuum cleaners are clean and fitted with HEPA filters  |     |    |     |          |
|     | Machines used for floor cleaning are cleaned and dry  |     |    |     |          |
|     | No inappropriate materials or equipment are stored in the domestic's room                         |     |    |     |          |
|     | Diluted products are discarded after 24 hours   |     |    |     |          |
|     | The floor is clean and free from spillage   |     |    |     |          |
|     | Floors including edges and corners are free of dust   |     |    |     |          |
|     | Cleaning equipment is colour coded  |     |    |     |          |
|     | Mops and buckets are stored according to the local policy   |     |    |     |          |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  | Mop heads are laundered daily or               |  |  |  |  |
|  | Totals   |  |  |  |  |
|  | Comments                                       |  |  |  |  |
|  | Potential number of yes answers                |  |  |  |  |
|  | Potential total (number of yes and no answers) |  |  |  |  |
|  | Percentage:                                    |  |  |  |  |

| 2.4 | Staff Kitchen   | Yes | No | N/A | Comments |
|-----|---|-----|----|-----|----------|
| 1   | Cleaning materials accessible and away from food  |     |    |     |          |
| 2   | Cleaning equipment is colour coded and stored separately from other cleaning equipment (green in kitchen) |     |    |     |          |
| 3   | <i>Drying cloths are disposable (paper roll)</i>  |     |    |     |          |
| 4   | Opened foods are labelled with name, date of opening and stored in pest proof container                   |     |    |     |          |
| 5   | Milk is stored in a fridge  |     |    |     |          |
| 6   | Food within expiry date   |     |    |     |          |
| 7   | Fridge is free from specimens and drugs   |     |    |     |          |
| 8   | Hands are washed prior to handling food   |     |    |     |          |
| 9   | Cooking appliances are visibly clean (toaster, microwave, cooker)   |     |    |     |          |
| 10  | There are no inappropriate items in the kitchen   |     |    |     |          |
|     |   |     |    |     |          |
|     |   |     |    |     |          |
|     | Totals  |     |    |     |          |
|     | Comments  |     |    |     |          |
|     | Potential number of yes answers   |     |    |     |          |
|     | Potential total (number of yes and no answers)  |     |    |     |          |
|     | Percentage:   |     |    |     |          |

## 2. Infection control Practices

### 3.1 Hand hygiene

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

| 3.1 | Hand hygiene  | Yes | No | N/A | Comments |
|-----|---|-----|----|-----|----------|
| 1   | The hand hygiene policy/procedure guidance is available to all care workers.  |     |    |     |          |
| 2   | Hand hygiene is an integral part of induction for all care workers.   |     |    |     |          |
| 3   | Care workers have received training in hand hygiene procedures (ask a member of staff workers)  |     |    |     |          |
| 4   | Care workers providing care have short nails which are clean and free from nail extensions and Varnish  |     |    |     |          |
| 5   | Staff are aware of practice "Bare below the elbow" Short sleeves , no wrist watches, stoned rings or other wrist jewellery is worn by care workers delivering "hands on" care |     |    |     |          |
| 6   | Hand hygiene is encouraged and alcohol rub are made available for visitors  |     |    |     |          |
| 7   | Posters promoting hand hygiene are available and on display   |     |    |     |          |
| 8   | Hand wash facilities are visibly clean and intact (check sinks, taps, splash backs, soap and towel dispensers)  |     |    |     |          |
| 9   | Hand wash basins are dedicated for that use only and free from inappropriate items  |     |    |     |          |
| 10  | There is easy access to hand wash basins  |     |    |     |          |
| 11  | Hand wash basins in clinical areas complies with HTM 64 i.e. no plugs or overflows and the taps are not directly situated above the plughole                                  |     |    |     |          |
| 12  | Hand wash basins in clinical areas have mixer taps that elbow/sensor operated.  |     |    |     |          |
| 13  | Liquid soap is available at each hand wash basin  |     |    |     |          |
| 14  | Liquid soap is in single use wall mounted Dispensers  |     |    |     |          |
| 15  | Alcohol hand rub is available at the point of use. Portable dispensers acceptable   |     |    |     |          |
| 16  | Soft paper towels in wall mounted dispensers are available at all hand wash basins  |     |    |     |          |
| 17  | Soap, towel and alcohol dispensers are clean  |     |    |     |          |
| 18  | Reusable towels are not used by care workers  |     |    |     |          |
| 19  | Re usable nail brushes are not used   |     |    |     |          |
| 20  | Hands free bins are available close to hand wash Basins   |     |    |     |          |
| 21  | Care workers clean their hands before and after each care activity. Observe different groups of care workers  |     |    |     |          |
|     | Totals  |     |    |     |          |
|     | Comments  |     |    |     |          |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|  | Potential number of yes answers                |  |  |  |  |
|  | Potential total (number of yes and no answers) |  |  |  |  |
|  | Percentage:                                    |  |  |  |  |

### 3.2 Personal protective equipment (PPE)

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

|    |  | Yes | No | N/A | Comments |
|----|--|-----|----|-----|----------|
| 1  | The organisation has comprehensive procedures and a policy for the appropriate use of PPE  |     |    |     |          |
| 2  | Care workers have received training in the use of PPE as part of local induction   |     |    |     |          |
| 3  | Sterile and non sterile gloves (powder free) and conforming to European Community standards are fit for purpose and available for care workers |     |    |     |          |
| 4  | Alternatives to natural latex rubber (NLR) are available for use by care workers and on service users with NRL sensitivity                     |     |    |     |          |
| 5  | Gloves are worn if there is a risk of exposure to blood and body fluids, cleaning fluids or Chemicals  |     |    |     |          |
| 6  | Powdered and polythene gloves are not used for clinical procedures   |     |    |     |          |
| 7  | There are a range of sizes available   |     |    |     |          |
| 8  | Gloves are worn as single use items  |     |    |     |          |
| 9  | Hands are decontaminated after the removal of gloves   |     |    |     |          |
| 10 | Gloves are stored appropriately  |     |    |     |          |
| 11 | Disposable plastic aprons are worn when there is a risk that clothing or uniforms may become exposed to body fluids or become Wet              |     |    |     |          |
| 12 | Disposable plastic aprons are worn as single use items for each clinical procedure or episode of patient care.                                 |     |    |     |          |
| 13 | Aprons are stored appropriately  |     |    |     |          |
| 14 | Eye and face protection is worn where there is a risk of splashing into the face and eyes  |     |    |     |          |
|    | Totals   |     |    |     |          |

### 3.3 Spillages and or contamination with blood and body fluids

Standard Statement: Body fluid spillage or contamination is dealt with in a way that reduces the risk of cross infection.

|   |  | Yes | No | N/A         | Comments |
|---|--|-----|----|-------------|----------|
| 1                                       | There is a policy/procedure for dealing with spills of body fluids   |     |    |             |          |
| 2                                       | Care workers have received training in dealing with body fluid spills  |     |    |             |          |
| 3                                       | Care workers who come into contact with body fluid spillages have been immunised against hepatitis B   |     |    |             |          |
| 4                                       | Care workers are aware of the action to take in the event of an inoculation incident   |     |    |             |          |
| 5                                       | Equipment used to clear body is disposable   |     |    |             |          |
| 6                                       | Appropriate disinfectants/spillage kits for cleaning body fluid spillages  |     |    |             |          |
| 7                                       | such as sodium hypochlorite 10,000 ppm (Milton diluted 1 in 10)<br>Medical Equipment that has been contaminated with body fluids has been cleaned appropriately. |     |    |             |          |
| 8                                       | PPE is worn to clean up body fluid spillage  |     |    |             |          |
| 9                                       | Furniture and equipment that has been contaminated with blood and body fluids and cannot be cleaned is condemned   |     |    |             |          |
| Totals                                  |  |     |    |             |          |
| Comments:                               |  |     |    |             |          |
| Total number of yes answers             |  |     |    |             |          |
| Potential total (Number of Yes and Nos) |  |     |    |             |          |
| Percentage                              |  |     |    |             |          |
| Status                                  |  |     |    | Review Date |          |

**3.4 Waste disposal Standard Statement:** All waste from premises providing health care is segregated and identified at source, transported and disposed of safely without risk of contamination, infection or injury to care workers and the general public and in accordance with legislation

|    |   | Yes | No | N/A | Comments |
|----|---|-----|----|-----|----------|
| 1  | There is a comprehensive policy/procedure in place for waste disposal   |     |    |     |          |
| 2  | The practice is registered to generate clinical waste.  |     |    |     |          |
| 3  | The practice has a contract with a licensed waste contractor (check records)  |     |    |     |          |
| 4  | Care workers have received training about the correct and safe disposal of healthcare waste (check training records)  |     |    |     |          |
| 5  | Waste is correctly segregated (according to current regulation)   |     |    |     |          |
| 6  | There are posters demonstrating correct Segregation   |     |    |     |          |
| 7  | Correctly colour coded waste containers/bags are in use   |     |    |     |          |
| 8  | Waste bags are securely sealed and labelled and dated and no more than 2/3rds full  |     |    |     |          |
| 9  | Clinical waste is not decanted from one container to another  |     |    |     |          |
| 10 | Waste bags are removed from clinical areas Daily  |     |    |     |          |
| 11 | Waste bins are foot operated, lidded and in good working order  |     |    |     |          |
| 12 | Waste bins are clean and in a good state of Repair  |     |    |     |          |
| 13 | There is no storage of waste in inappropriate Areas   |     |    |     |          |
| 14 | There is a dedicated area for the storage of healthcare waste ,which is under cover, free from vermin and pests, kept locked and inaccessible to animals and the public |     |    |     |          |
| 15 | The storage area is clean and tidy  |     |    |     |          |
| 16 | All waste is collected on a regular basis by a licensed contractor at least once a week   |     |    |     |          |
| 17 | Consignment notes are kept and up to date   |     |    |     |          |
| 18 | The producer of the waste is aware of their duty of care  |     |    |     |          |

|   |        |  |  |             |  |
|---|--------|--|--|-------------|--|
|   | Totals |  |  |             |  |
| Comments:                               |        |  |  |             |  |
| Total number of yes answers             |        |  |  |             |  |
| Potential total (Number of Yes and Nos) |        |  |  |             |  |
| Percentage                              |        |  |  |             |  |
| Status                                  |        |  |  | Review Date |  |

### 3.5 Prevention of blood/body fluid sharp injuries bites and splashes.

Standard Statement: Sharps/needle stick injuries and splashes involving blood or other body fluids are managed in away that reduces the risk of injury or infection.

|    |   | Yes | No | N/A | Comments |
|----|---|-----|----|-----|----------|
| 1  | The organisation has comprehensive procedures and a policy for the management of sharps/needle stick injuries or splashes and bites in a way that reduces injury or infection |     |    |     |          |
| 2  | There are arrangements in place to ensure that care workers who have contact with blood and body fluids are immunised against hepatitis B                                     |     |    |     |          |
| 3  | There are arrangements in place to ensure that care workers are dealt with appropriately in the event of needle stick/bite or splash Injury                                   |     |    |     |          |
| 4  | All care workers have received training in sharps/bites/splash management and are aware of the actions to take following an injury. (ask a member of care workers)            |     |    |     |          |
| 5  | All needle stick/sharps/bites/splash injuries are recorded  |     |    |     |          |
| 6  | There are appropriate devices to use to reduce the risk of needlestick injuries,=.  |     |    |     |          |
| 7  | There is a poster displayed for the management of needle stick/sharps/bites/splash injuries   |     |    |     |          |
| 8  | Sharps containers comply with BS 7320/UN3291  |     |    |     |          |
| 9  | Sharps containers are correctly assembled   |     |    |     |          |
| 10 | All sharps containers in use are labelled with date and locality and signed   |     |    |     |          |
| 11 | Sharps containers are available at the point of use (e.g. small community bins)   |     |    |     |          |
| 12 | Sharps containers are stored safely away from public access and out of children's reach   |     |    |     |          |
| 13 | Sharps containers are not overfilled  |     |    |     |          |
| 14 | There are no inappropriate items in the sharps Containers   |     |    |     |          |
| 15 | Needles and syringes are disposed of as a single unit   |     |    |     |          |
| 16 | Syringes with a residue of prescription only medication are disposed of in line with current Legislation  |     |    |     |          |
| 17 | The temporary closure mechanism is used when the bin is not in use  |     |    |     |          |
| 18 | Full sharps containers are sealed correctly – tape or stickers are not used   |     |    |     |          |
| 19 | Sharps containers are not placed in waste bags prior to disposal  |     |    |     |          |
| 20 | Sealed and locked bins are stored in a locked facility away from public access  |     |    |     |          |
| 21 | Sharps containers are available for use and located within easy reach   |     |    |     |          |
| 22 | Sharps containers are visibly clean   |     |    |     |          |
| 23 | Needles are not resheathed  |     |    |     |          |

|    |  |  |  |  |
|----|--|--|--|--|
| 24 | The person uses the sharps disposes of it themselves |  |  |  |
|----|--|--|--|--|

Comments:

Total number of yes answers

Potential total (Number of Yes and Nos)

Percentage

Status

Review Date

#### 4 Clinical Practices

Standard Statement: clinical practices will be based on best practice and reflect infection control guidance to reduce the risk of cross infection to service users whilst providing appropriate protection to care workers

NB: This section should be undertaken over a period of time to allow for the observation of as many practice elements as possible.

##### 4.1 Aseptic Technique

|   |   | Yes | No | N/A         | Comments |
|---|---|-----|----|-------------|----------|
| 1                                       | There is a policy/ procedure for aseptic Technique                  |     |    |             |          |
| 2                                       | Hands are decontaminated prior to the Procedure                     |     |    |             |          |
| 3                                       | Exposure of the susceptible site is kept to a Minimum               |     |    |             |          |
| 4                                       | Sterile/non sterile gloves are used as Appropriate                  |     |    |             |          |
| 5                                       | A clean plastic apron is used for each Procedure                    |     |    |             |          |
| 6                                       | Only sterile equipment comes into contact with the susceptible site |     |    |             |          |
| 7                                       | Sterile packs are in date and undamaged                             |     |    |             |          |
| 8                                       | Care workers are aware of the item for single Use                   |     |    |             |          |
| 9                                       | Single use items are not reused                                     |     |    |             |          |
| 10                                      | Dressing trolleys are clean and in a good state of repair           |     |    |             |          |
|   | Totals  |     |    |             |          |
| Comments:                               |   |     |    |             |          |
| Total number of yes answers             |   |     |    |             |          |
| Potential total (Number of Yes and Nos) |   |     |    |             |          |
| Percentage                              |   |     |    |             |          |
| Status                                  |   |     |    | Review Date |          |

**INFECTION CONTROL AUDIT  
SUMMARY FEEDBACK**

**GP Practice:**

**Date of Audit:**

**Auditors:**

| Standard audited |  | %<br>Score | Level of compliance               |
|------------------|--|------------|-----------------------------------|
| <b>1</b>         | <b>Management and organisation</b>       |            |                                   |
| <b>2</b>         | <b>Environment and equipment</b>         |            |                                   |
| <b>2.1</b>       | <b>General environment and equipment</b> |            |                                   |
| <b>2.2</b>       | <b>Dirty utility</b>                     |            |                                   |
| <b>2.3</b>       | <b>Domestics room</b>                    |            |                                   |
| <b>2.4</b>       | <b>Staff kitchen</b>                     |            |                                   |
| <b>3</b>         | <b>Infection control practices</b>       |            |                                   |
| <b>3.1</b>       | <b>Hand hygiene</b>                      |            |                                   |
| <b>3.2</b>       | <b>Personal protective equipment</b>     |            | Nb audit tool can be accessed via |
| <b>3.3</b>       | <b>Spillages</b>                         |            |                                   |
| <b>3.4</b>       | <b>Waste disposal</b>                    |            |                                   |
| <b>3.5</b>       | <b>Handling of sharps</b>                |            |                                   |
| <b>3.6</b>       | <b>Specimen handling</b>                 |            |                                   |
| <b>3.7</b>       | <b>Vaccine Transport and Storage</b>     |            |                                   |
| <b>3.8</b>       | <b>Decontamination of equipment</b>      |            |                                   |
| <b>4</b>         | <b>Clinical practices</b>                |            |                                   |
| <b>4.1</b>       | <b>Aseptic procedures</b>                |            |                                   |



## APPENDIX 3

### Medicines which can produce diarrhoea

Diarrhoea is a common adverse drug reaction with many medications. Antimicrobials account for about 25% of drug induced diarrhoea. (Lee 2006)

Whilst diarrhoea has been seen with most medicines, the most commonly associated ones are listed below. Alternative diagnoses for the diarrhoea are important, therefore careful attention should be paid to the temporal relationship between the time that the medication was first taken and when the diarrhoea first appears. (DoH & HPA 2008).

- Acarbose
- Antimicrobials
- Biguanides
- Bile salts
- Colchine
- Cytotoxics
- Dipyridamole
- Gold preparations
- Iron preparations
- Laxatives
- Leflunomide
- Magnesium preparations, such as antacids
- Metoclopramide
- Misoprostol
- Non steroidal anti-inflammatory drugs, such as aspirin and ibuprofen
- Osalzine
- Proton pump inhibitors
- Ticlopidine

## APPENDIX 4

### ***Escherichia coli (E coli) 0157***

#### **What is *E Coli* 0157?**

*E. coli* 0157 is one of hundreds of strains of the bacterium *Escherichia coli*. Most strains are harmless and live in the intestines of humans and animals, but this strain produces a powerful toxin, which can cause severe illness. *Escherichia coli* (VTEC) is known as *E. coli* 0157 is found in the intestines of some cattle and other domesticated animals such as goats and also in the intestines of infected people.

#### **What are the symptoms of infection with *E. coli* 0157?**

*E. coli* 0157 is often very mild, but some people develop diarrhoea, which can be severe and bloody, with abdominal cramps. A few cases (especially in children under 5 years of age and older people) may develop a complication called haemolytic uraemic syndrome, which is a form of kidney failure. They may need admitting to hospital for renal dialysis.

#### **How is *E. coli* 0157 spread?**

There are 3 main ways in which the infection can be spread to humans.

The bacteria are present in the faeces of some farm animals and this can contaminate the carcass during slaughter. *E. coli* 0157 present on the surface of meat can become mixed into the meat during the mincing process. The bacteria present in faeces may also contaminate udders and milking equipment and get into the raw milk.

The infection can be acquired during visits to farms and fields where farm animals live. Their microorganisms can be found in the general environment (e.g. gates, fences and soil) or contaminate salads and vegetables being grown in the vicinity. Faeces may also be picked up on shoes, clothing and fingers. Infection can develop if the bacteria are able to get into the mouth through poor hygiene or eating poorly washed salads and vegetables.

The infection can be passed from person to person by direct or indirect contact with the faeces of people with *E. coli* 0157 infection. This may happen within families, households, care homes and nurseries where equipment and the environment may become contaminated.

Ingestion of a small number of organisms can cause illness.

#### **How can the spread of *E. coli* 0157 be prevented?**

Don't eat undercooked meat products, e.g. beef burgers and minced beef. Thoroughly cook meat until the juices run clear.

Drink only pasteurised milk.

Wash hands before handling food, after using the toilet or changing nappies. Wash animal faeces from shoes and clothing, followed by hand washing. Follow recommended precautions for school visits to farms.

In residential care, nurse in a single room with en-suite, or dedicated toilet facilities until diarrhoea has stopped for 48 hours (may need negative stools see below).

#### **When can people with *E. coli* 0157 infection return to work/school/playgroup?**

Most people must remain away until well and symptom free for 48 hours.

Certain individuals in high risk groups including service users and care workers in care homes and food handlers must remain away until 2 samples of faeces, obtained at least 48 hours apart, are negative.

Any household contact in a risk group will need to be tested and excluded from work or school. The Health Protection Unit will advise if this is necessary.

## APPENDIX 5

### Pulmonary Tuberculosis

#### What is Tuberculosis?

Pulmonary Tuberculosis (TB) is caused by *Mycobacterium tuberculosis* and *Mycobacterium bovis*. It usually affects the lungs, although it can occur elsewhere in the body. TB infection occurs when the bacteria are inhaled. The bacteria are usually overwhelmed by the body's immune system, but may become active again later in life. In the UK many of the elderly may develop TB following an infection earlier in life.

People with TB infection generally complain of a cough lasting more than one month, chest pain, coughing up sputum that may be blood-stained, loss of appetite, weight loss, tiredness and weakness and night sweats.

#### How is TB spread?

Only people with "open" TB infection affecting the lungs are an infection risk to others. These individuals expel the bacteria into the air during coughing; and others may inhale the bacteria. Those most susceptible to infection are those who have had prolonged close contact, particularly members of the same household.

In the care home setting this may include many of the other service users and care workers with whom they have close contact over a long period of time.

However TB is difficult to catch and the disease develops slowly and may take several months for symptoms to appear. Many people are immune to TB especially if they have had BCG vaccination.

Some people are at greater risk of developing TB including children, the elderly, diabetics, people taking steroids, people taking other drugs affecting the immune system, people living in overcrowded or poor housing, people who are dependent upon drugs or alcohol, people with chronic ill health, people with HIV infection or leukaemia.

#### How is spread prevented?

Care workers should be immunised against TB.

The Health Protection Team and the TB Clinic/Health Visitor are notified of all cases of TB and ensure that contacts are identified and followed up if necessary. As TB is slow-growing, follow-up is not a matter of urgency.

Service users with open pulmonary TB should keep to their own room until they have had two weeks of effective anti-TB treatment.

People with multi drug-resistant TB (MDRTB) should be nursed in a negative pressure room until they are no longer infectious. This may take some weeks or months.

A high-efficiency particulate filter mask (respirator) should be worn until the service user has had two weeks of anti-tuberculosis treatment. This is particularly important if the service user is coughing.

People with TB should be encouraged to cough into tissues and put their hand over their mouth to prevent airborne spread and dispose of the tissues carefully,

People visiting countries where TB is endemic for more than one month should be immunised.

Babies born to parents from countries where TB is endemic should also be immunised, ideally at birth.

## APPENDIX 6

### Chickenpox/Shingles (varicella-zoster virus)

#### What is it?

Chickenpox is an acute, generalised viral infection, commonly affecting children. The rash tends to affect central areas of the body, e.g. the trunk more than the limbs, also the scalp, mucous membrane of the mouth and upper respiratory tract and eye may be affected. It is infectious from about 2 days before, to 5 days after, the rash appears.

Shingles only occurs in people who have previously had chickenpox infection. Following chickenpox, the virus remains dormant in the body, usually in a sensory nerve root. In later months or years the virus reactivates and causes a shingles rash at the skin site supplied by the nerve. Therefore anyone with shingles must have had chickenpox in the past, even if they don't remember it. Shingles causes a rash of tiny blisters, usually affecting a clearly defined area of the body. After a few days, the blisters crust over and form scabs. The rash is not itchy but it can be very painful. The pain may start a day or so before the rash appears. It is infectious for about a week after the blisters appear or until 48 hours after the start of anti-viral treatment.

#### How are they spread?

Chickenpox is spread by contact with infected respiratory droplets or fluid from the blisters. It is very infectious to people who have not have chickenpox before. Shingles cannot be spread from person to person. However, the blister fluid contains the varicella virus and therefore people who have never had chickenpox should avoid contact with cases of both chickenpox and shingles.

#### Who is most at risk?

Certain individuals have additional risks if infected, including the immuno-compromised (e.g. those receiving steroids or cytotoxic drugs), non-immune pregnant women and neonates. If they have contact with a case during the infectious phase they may need immunoglobulin. Discuss the situation with occupational health, microbiologist or GP.

Non-immune care workers should be immunised against varicella. Non-immune care workers, who are exposed to the virus, should be aware of the symptoms which they may develop 8-21 days after contact with a case (28 days if immunoglobulin has been given).

The risk to the foetus/neonate depends when the mother is infected.

All non-immune pregnant care workers who have had contact with a case will be offered immunoglobulin.

#### How is spread prevented?

People with chickenpox should stay off work for at least 5 days from the onset of the rash.

People who are not immune to chickenpox should avoid contact with cases.

In care homes, keep service users with chickenpox/shingles in their room for 5 days after the onset of the rash.

Wear gloves if applying lotion to the rash.

In residential care settings treat laundry as infected. Seek medical advice if the rash involves the eye

## APPENDIX 7

### SCABIES

#### What is Scabies?

Scabies is a condition of the skin caused by a tiny mite called *Sarcoptes scabiei*. Symptoms are caused by an allergic reaction to the by-products of the mite. Scabies occurs worldwide and outbreaks in the UK often occur in care homes, elderly care wards, schools and nurseries.

Most cases of scabies only have around 10 mites on their body. This is known as classical scabies.

Classical scabies features itching two to six weeks after a first infection or one to four days after re-infection. The itching is often severe and worse at night or after a bath. A symmetrical allergic rash appears from the axillae to the calves and around the waist, but not the upper back.

In individuals with impaired immune systems they can be infected with many hundreds of mites and this is known as crusted or Norwegian scabies. The features of crusted scabies are dry, flaky lesions that may be present in many areas of the body. The lesions can flake off and because they contain hundreds of mites, it is very infectious.

#### How is scabies spread?

To transmit classical scabies direct, prolonged skin-to-skin contact is required. Holding hands is a common route.

Bedding and clothing does not contain scabies mite unless the individual has crusted scabies.

#### How is spread prevented?

Be aware of the symptoms of scabies and watch out for cases. Treat all cases and their contacts, ideally on the same day.

Apply lotion to cool, dry skin including under nails and in skin creases.

Leave lotion on skin for 8 - 24 hours. Re-apply to areas of skin that subsequently become wet e.g. after washing hands or incontinence etc.

Itching can persist for several weeks after treatment. Wear gloves for contact with a case until treated. Wash hands and skin after contact.

#### Crusted/Norwegian Scabies

For crusted scabies more intensive treatment is required, handle bedding etc with gloves, and place in plastic bag until laundered. Tumble-drying kills the mites. Spread to others is very common.

APPENDIX 8

EXAMPLE OF A CLEANING SCHEDULE

| CLEANING SCHEDULE                               |       |        |         |           |          |                   |
|---|-------|--------|---------|-----------|----------|-------------------|
| Task  | Daily | Weekly | Monthly | Quarterly | ½ Yearly | Yearly            |
| <b>General areas</b>                            |       |        |         |           |          |                   |
| Empty/Wipe bins                                 |       |        |         |           |          |                   |
| Clean bins                                      |       |        |         |           |          |                   |
| Clean toilets/sink                              |       |        |         |           |          |                   |
| Mop hard floors                                 |       |        |         |           |          |                   |
| Check clean carpets                             |       |        |         |           |          |                   |
| Vacuum clean carpets                            |       |        |         |           |          |                   |
| Wipe furniture                                  |       |        |         |           |          |                   |
| Perimeter dust                                  |       |        |         |           |          |                   |
| High level dust                                 |       |        |         |           |          |                   |
| Replenish soap, hand towels and toilet roll etc |       |        |         |           |          |                   |
| Descalc W.C's                                   |       |        |         |           |          |                   |
| Deep clean Carpets                              |       |        |         |           |          | November          |
| Scrub/suction dry hard floors                   |       |        |         |           |          |                   |
| Damp dust furniture                             |       |        |         |           |          |                   |
| Change window curtains                          |       |        |         |           |          | April and October |
| Clean window Blinds                             |       |        |         |           |          |                   |
| Change privacy Curtains                         |       |        |         |           |          |                   |
| Change window curtains                          |       |        |         |           |          |                   |
| Clean cupboards                                 |       |        |         |           |          |                   |
| Treatment Room Surfaces and Equipment           |       |        |         |           |          |                   |

## APPENDIX 9

### SUGGESTIONS FOR STATEMENT FOR INCLUSION IN JOB DESCRIPTIONS

#### **Suggestion A** **Infection Prevention and Control**

In accordance with the Health and Social Care Act 2008, infection control is everyone's responsibility. All care workers both clinical and non-clinical, are required to adhere to the (insert name of organisation) Infection Prevention and Control Policies and Procedures and make every effort to maintain high standards of infection prevention and control at all times thereby reducing the burden of Infections including MRSA.

All care workers employed by the (insert name of organisation) have the following key responsibilities:

Care workers must wash their hands or use alcohol gel between each service user contact.

Care workers have a duty to attend mandatory infection control training provided for them by (insert name of organisation).

Care workers who develop recurrent skin, soft tissue and other infections that may be transmittable to service users, have a responsibility to report this to their line manager and occupational health advisor.

#### **Suggestion B** **Infection Prevention and Control**

In accordance with the Health and Social Care Act 2008, the post holder will actively participate in the prevention and control of infection within the capacity of their role. The Act requires the post holder to attend infection prevention and control training on induction and at regular updates and to take responsibility for the practical application of the training in the course of their work. Infection prevention and control must be included in any personal development plan or appraisal.