



# Principles of the causes and spread of infection

## An Infection is

Microorganisms e.g. bacteria and viruses which are not normally present within the body invade and grow causing illness and/disease.

## Colonisation means

Presence of microorganisms which do not cause illness or disease. Some organisms can be present as either

### Pathogenic:

Causes disease, illness and/or harm.

### Non-pathogenic:

Does not cause any harm or illness and may be beneficial.

### Systemic infection:

Has spread throughout the body.

### Local infection:

Is confined to one part/area/organ of the body

### Systemic examples:

Influenza, malaria, tuberculosis.

### Localised Examples:

Infected cut/wound, appendicitis, endocarditis, eye or ear infection.

### Bacteria:

Single cells, microscopic; some are pathogens, others harmless, others useful e.g. to make cheese, some pathogens produce toxins, antibiotics can be used to fight infections.

### Viruses:

Much smaller than bacteria, can only multiply within cells, cannot be treated with antibiotics.

### Fungi:

Can be single or multi celled, very few are pathogens, live in or on the body

## Parasites:

Many different forms, living in or on the body - microscopic e.g. causing malaria, insects e.g. lice, ticks, mites, tapeworms, roundworms.

Differences between bacteria, viruses, fungi and parasites: Covering: cell structure, growth, reproduction; aerobic/ anaerobic; normal flora/ pathogens etc.

**Bacteria examples:** Food poisoning, tuberculosis, gonorrhoea, conjunctivitis, pneumonia, meningitis, wound infections.

**Viruses examples:** Influenza, colds, chickenpox, measles, herpes.

**Fungi examples:** Thrush, athlete's foot, ringworm.

**Parasite examples:** Malaria, head lice, scabies, hookworm, roundworm, tapeworm.

## Common illnesses and infections:

Include:

**Bacteria** (e.g. tuberculosis, MRSA, tetanus, gangrene, Legionnaires disease, salmonella and conjunctivitis);

**Viruses** (e.g. winter vomiting disease, measles, mumps, chickenpox, HIV, Hepatitis B, warts and influenza);

**Fungal infections** (e.g. thrush, ringworm and athlete's foot)

**Parasite infestations** (scabies, lice, head lice, fleas, threadworm and roundworm).

## The conditions required for growth of:

**Bacteria:** Warmth, moisture, correct atmosphere (with or without oxygen), nutrients.

**Viruses:** Only multiply within living cells

**Fungi:** Warmth, moisture, oxygen, nutrients

**Parasites:** Warmth, moisture, oxygen, nutrients Optimum temperature, moisture, nutrients, gases and time.

## How microorganisms can enter the body and exit the body

**Enter the body:** Via the digestive system in food or drink, breathed in through the respiratory tract (nose by inhalation), digestive tract (mouth by ingestion), and urinary tract - invasion from exterior, through broken skin (cuts / wounds/bites), eyes, genital tract and inoculation into blood.

**Exit the body:** Respiratory tract - exhaled breath and secretions, digestive tract in faeces, urinary tract in urine, eye secretions, and all body fluids including blood, saliva and semen. Common sources of infection: Body fluids: vomit, tears, breast milk, semen, vaginal secretions, urine, blood, mouth/ nose secretions, sweat, sputum, droplets spread by sneezing/ coughing; food; water; air-borne; carried by insects or animals.

### Common sources of infection:

**Body fluids:** vomit, tears, breast milk, semen, vaginal secretions, urine, blood, mouth/ nose secretions, sweat, sputum, droplets spread by sneezing/ coughing; food; water; air-borne; carried by insects or animals.

**Indirect contact:** Via contaminated water, food, animals, insects, objects, dust etc

**Direct contact:** Person to person in body fluids or on hands.

### What is meant by 'cross infection'

Transfer of microorganisms e.g. from unsterilized medical equipment; coughing and sneezing, through human contact, touching contaminated objects or from dirty bedding.

### Links of the 'chain of infection':

#### Six interlinked factors –

- Presence of a microorganism; a 'reservoir' where the organism can survive ;
- A way for the organism to leave the reservoir;
- A mode of transmission;
- A way to enter the host;
- A susceptible host in which to set up infection.



### Why measures are taken to break the chain:

If one or more of the links are broken infection is not spread, microorganisms are not transmitted to a new host. This is the basis of infection prevention and control.

### Steps that can be taken to break the chain of infection:

- Remove reservoir by efficient cleaning, good housekeeping etc.
- high standards of personal hygiene to prevent spread by body fluids,
- clean equipment etc. to prevent transfer of organisms, immunisation/inoculation to reduce susceptibility of host.

## The importance of personal hygiene and health in the prevention and control of infection

### Definition of Personal Hygiene

**Hygiene** is a set of practices performed for the preservation of health.

According to the World Health Organization (WHO),

"**Hygiene** refers to conditions and practices that help to maintain health and prevent the spread of diseases.

### Why Is Personal Hygiene Important?

To prevent contamination of foods and bacteria from spreading from host to host. Prevents illness and disease.

## The Risks of Poor Personal Hygiene

is a risk to own health and decay of teeth, developing infections and skin irritations. Spread of infection to others that could cause more serious harm to others if they are elderly or have a low immune system.

Ways you can reduce or slow the spread of infections employees should follow the following procedure:

- Get the appropriate vaccine.
- Wash your hands frequently.
- Stay home if you are sick (so you do not spread the illness to other people).
- Use a tissue, or cough and sneeze into your arm, not your hand. Turn away from other people.
- Use single-use tissues. Dispose of the tissue immediately.
- Wash your hands after coughing, sneezing or using tissues. .
- Do not touch your eyes, nose or mouth (viruses can transfer from your hands and into the body).
- Do not share cups, glasses, dishes or cutlery.

## Effective Hand Washing

Hand washing is the single most important method of preventing the spread of infection. ALL STAFF must ensure that their hands are thoroughly washed and dried:

- Between seeing client where direct contact is involved, no matter how minor the contact
- After handling any bodily fluids or waste or soiled/potentially soiled clothing or other items.
- After using the toilet
- Before handling foodstuffs
- All cuts and abrasions should always be covered with waterproof dressings



## Hygiene

- You must always look after personal hygiene.
- You must protect all open wounds with appropriate dressings.
- You must report infections immediately
- Your general appearance and manner of dress must conform to the company's standards

## Hand Decontamination

Keep nails short but not bitten – most microbes on the hands live under the nails (Larson 1989).

Do not wear rings especially with engraved surfaces or stones; total bacterial count when rings are worn is higher than average (Larson 1985, Jacobson 1985).

Do not wear nail polish or artificial nails as people wearing these items often do not wash their hands vigorously enough to remove contaminants (Larson 1989). They harbour bacteria and nail polish can chip off into food or long nails can tear thin skin.

Remove wristwatches and bracelets and roll up long sleeves prior to handwashing (Gould 1994).

## When to wash your hands

- Wash your hands when you arrive at every home
- Wash your hands before you leave every home
- Wash your hands after using the toilet Wash your hands before preparing food
- Wash your hands after dealing with any bodily fluid or soiled materials (even if wearing gloves). Wearing gloves is not a substitute for hand-washing
- Wash your hands after sneezing or blowing your nose “Coughs and Sneezes Spread Diseases”.

The old saying remains true, even more so with concerns about illnesses like flu. When we cough or sneeze we have been taught from an early age to cover our nose and mouth however this contaminates our hands with the very organisms that cause illnesses.

## Legislation

The Personal Protective Equipment at Work Regulations 1992 cover equipment intended to be used by a person at work that affords protection against health and safety risks. This includes protective clothing (e.g. overalls, weatherproof clothing, gloves, safety footwear) as well as equipment such as protective eyewear and safety harnesses.

## Use of Personal Protective Equipment (PPE)

The safety of staff and customers is paramount. For this reason staff must use Personal Protective Equipment (e.g. disposable gloves) in the workplace of necessary.

Employers should make these available where needed .

It is each staff member's responsibility to ensure an uninterrupted supply of PPE.)

It is each staff member's responsibility to ensure an adequate supply of PPE for themselves and their team members by notifying the appropriate person of stock requirements.

If the local line manager refuses or fails to provide essential PPE staff must immediately inform Head office.

## Spillages (Body Fluids)

The spillage of any body fluids or waste such as blood, faeces and urine should be cleaned up as quickly as possible and with caution. It is best to treat every spillage as potentially infectious.

You should therefore:

1. Wear protective gloves and aprons
2. Cover the spillage with paper towels if available
3. Carefully wipe up the spillage with more paper towels
4. Depending on the nature and volume of the spillage, dispose of the waste by double wrapping and putting in a plastic waste sack, or flush unwrapped down the toilet
5. Use hot soapy water or, if available, an anti-bacterial solution to clean the remainder of the spillage
6. Dispose of soiled gloves and aprons appropriately
7. Wash hands thoroughly with hot soapy water Temporary workers working in institutional settings (hospitals, nursing homes, etc.) should follow local procedures.

## What to do when there is a risk of contagion

If a member of staff has contracted an infectious disease this must be reported immediately to the office, as delay can put the member of staff and customers at risk.

1. You must report to management any medical condition that could affect the safety of yourselves or others, bearing in mind the vulnerability of some customers
2. You must co-operate with the company on the implementation of medical and occupational health provisions
3. It is important that management is notified immediately when anyone becomes ill with:
  - diarrhoea, sickness, vomiting or other stomach disorders
  - any discharge from eyes, ears or nose, or a sore throat
  - any septic skin condition such as sores, boils, septic cuts, and rashes

- any other infection (Also see “Time-Keeping & Reporting Sick)

Such illness often causes a rapid increase in the number of germs present in the body. These may be spread throughout the body or localised as boils. In all instances, however, the germs can easily be transferred to the service user by contact or through food preparation.

To minimise the chances of infections spreading in this way it is necessary for staff that are ill to be;

1. Kept away from work until their GP pronounces them fit to return (ensuring that the GP is made aware of the nature of their work), and

2. Kept away from tasks which will involve them in direct contact with customers. If you come into contact with anyone with the following infections, you may go to work UNLESS you too show symptoms associated with: Dysentery Chicken Pox Food Poisoning Infected Jaundice Pulmonary Tuberculosis Mumps Whooping Cough H1N1 (Swine Flu)

If you meet clients or other people who have contracted any of the following diseases, you may not be required to go to work. In any event you should report immediately to the office who will, if appropriate, contact our Occupational Health advisor and advise you of any further action you should take:

- Typhoid Hepatitis A or B
- German Measles (Rubella)
- Meningitis
- Diphtheria
- HIV/AIDS

## **PRINCIPLES OF DECONTAMINATION, CLEANING AND WASTE MANAGEMENT IN HEALTH AND SOCIAL CARE SETTINGS**

### **THE IMPORTANCE TO HAVE A CLEAN ENVIRONMENT IN THE WORKPLACE**

A clean environment will reduce the risk of the spread of infection, the chances of contracting an infection and the risk of cross infection.

Meets legal requirements and policy and procedures.

## UNDER THE PROCEDURE:

- Effective hand hygiene practices
- Maintenance of skin integrity
- Protection of open wounds/skin lesions
- Use of appropriate personal protective clothing
- Avoidance of sharps injury through safe use and disposal of sharps
- Appropriate decontamination of instruments and equipment, including safe management of blood spillage (Refer Decontamination Policy)
- Maintaining a clean hospital environment (Refer Source Isolation Policy and Decontamination Policy).
- Safe disposal of waste (refer Trust Waste Management Policy)
- Safe handling and laundering of used linen

## A CLEANING SCHEDULE

The objective of any cleaning schedule is to obtain the maximum effect from the minimum effort. Regular cleaning will prevent the build-up of dirt on equipment, surfaces and the structure.

### Why Clean?

- To assist in ensuring the quality of the finished product by reducing the risk of contamination by bacteria and foreign matter;
- To provide a healthy and safe environment for staff to work in;
- To maintain equipment and the structure in a condition which minimises the growth of bacteria and risk of infection;
- To promote a good image to customers.

### A cleaning schedule states:

The frequency of cleaning,

The persons responsible,

The method of cleaning,

The amount and type of chemical to be used

Precautions to be taken (i.e. protective clothing).

## THE PURPOSE OF COLOUR CODING EQUIPMENT

Colour coded cleaning is the process of reducing the spread of germs across different areas of the building to prevent cross contamination.

The four main colours used and to separate out areas such as bars, public areas, kitchen & food preparation areas and washrooms, are red, blue, green and yellow.

- Red –toilets
- Yellow – kitchen
- Blue – bar or licensed properties
- Green – public

## THE ROLES AND RESPONSIBILITIES OF THE EMPLOYER, EMPLOYEE AND SPECIALIST PERSONNEL IN RELATION TO CLEANING, DECONTAMINATION AND WASTE MANAGEMENT

### Managers

- Ensuring that all staff are aware of this guidance and that the guidance is implemented.
- Ensuring that any staff that develop eczema, dermatitis or any other skin condition are referred to the Occupational Health Department.
- All Staff undertake annual mandatory Infection Prevention and Control Training including hand hygiene
- Hand Hygiene audits are carried out monthly

### Employees

- Carry out effective Infection prevention and control procedures
- To act in a way which minimises risks to the customer.
- To ensure they attend annual infection prevention and control mandatory training including hand hygiene

### Specialist personnel

Up to date with all legislative requirements and follow own workplace policy and procedures

**IF YOU HAVE CONCERNS ABOUT THE STANDARD OF HYGIENE IN YOUR WORKPLACE**

**YOU HAVE A DUTY OF CARE TO REPORT TO YOUR SUPERVISOR OR MANAGER.**

This needs to be addressed ASAP due to the risk of the person spreading germs and bacteria to others.

Concerns that need to be reported:

- A staff member not following the colour coded cleaning system.
- A staff member not cleaning equipment before or after use which may be contaminated.
- Non-use of protective personal equipment when required.

## Why it is important to receive training

It's a legal responsibility within any employment setting.

It is important to enable you to complete tasks safely and not cause harm or injury to yourself or others.

## DECONTAMINATION:

### **The term decontamination:**

Decontamination is a process (or combination of processes), which removes or destroys contamination and thereby prevents micro-organisms or other contaminants reaching a susceptible site in sufficient quantities to cause infection or other harmful response.

## THE THREE STAGES OF DECONTAMINATION:

### **Cleaning**

The physical removal of contaminants including dust, soil and organic matter, along with a large proportion of microorganisms. Thorough drying following cleaning will cause a further reduction. This is the first and most crucial step in any decontamination process.

### **Disinfection**

Utilising heat or chemicals organisms to a level which is not harmful to health (but not all viruses and/or bacterial spores) to reduce the number of viable microorganisms.

### **Sterilisation**

Renders the object free from viable micro-organisms, including bacterial spores and viruses

## Why Decontamination is Important?

To remove or destroy contaminants and thereby prevent micro-organisms or other contaminants reaching a susceptible site in sufficient quantities to cause infection or other harmful response.

## PROCEDURE TO FOLLOW WHEN USING CLEANING AGENTS

All items and packaging should be carefully examined after cleaning, disinfection and sterilisation and prior to use for contamination

Disinfectants are subject to the Control of Substances Hazardous to

Health (COSHH) Regulations (2002 as amended). To comply with COSHH, all disinfectants must be kept in locked cupboards. Instructions for use must be displayed close to the cupboard. When using disinfectants the approved procedure must be followed

PPE should be worn in accordance the COSHH assessment for the disinfection process

Area needs to be ventilated and displayed signage to warn others cleaning is in place and to prevent incidents or accidents.

### Procedure to follow when using disinfecting agents

- Only use approved disinfectants
- Use scrupulously clean containers only
- Wear appropriate PPE
- Ensure thorough pre-cleaning of items prior to disinfection
- Never use chemical disinfection when sterilisation is required or when cleaning alone is adequate
- Ensure correct measured dilution
- Never pre-dilute disinfectants and store them
- Ensure items are immersed in disinfectant, the fluid entirely covering articles and penetrating all crevices, including the insides of tubes

## THE THREE SAFETY PROCEDURES USED A THE DIFFERENT STAGES OF DECONTAMINATION

- Automated processes are preferable to manual processes
- Carry out cleaning in a designated “dirty” area where possible and avoid splashing
- Wear appropriate personal protective equipment (PPE) e.g., gloves, plastic apron and eye protection - even if an ultrasonic bath is used
- Use freshly prepared detergent, diluted as per manufacturer’s instructions
- Never pre-dilute detergents and store them
- After cleaning, rinse items thoroughly with water (wipe electro medical equipment – do not immerse)
- Dispose of cleaning solution via sluice hopper or equipment sink
- Only use approved disinfectants

## DISINFECTING

- Use scrupulously clean containers only
- Wear appropriate PPE
- Ensure thorough pre-cleaning of items prior to disinfection
- Never use chemical disinfection when sterilisation is required or when cleaning alone is adequate
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## STERILISATION

- Wear appropriate PPE
- Items must be physically clean before being exposed to any sterilisation process

## THE USE OF PERSONAL PROTECTIVE EQUIPMENT

PPE is vital to keep yourself and others safe and free from infection in the workplace. The correct apron and gloves must be worn for the task at hand and appropriate goggles or footwear depending on the task at hand.

## MEANING OF STERILE

Free from bacteria or other living microorganisms; totally clean.  
"a sterile needle and syringes"

## PROCEDURE TO USE TO STERILE EQUIPMENT

Sterilization is generally attained when heat, irradiation, high pressure, filtration or chemicals are applied.

One of the oldest forms of sterilisation is dry heat sterilisation. It is also one of the least used methods when it comes to sterilising medical equipment.

Heat sterilisation can be divided into two separate categories:

Dry Heat Sterilisation and Moist Heat Sterilisation

### **Dry Heat Sterilisation:**

Dry Heat Sterilisation is one of the earliest forms of sterilisation ever practiced, and it utilizes hot air that is free from any water vapor. There are various methods of dry heat sterilisation as well. Some of the most common of these methods are:

- Hot Air Oven
- Burning or Incineration

- Radiation
- Flaming
- Microwave

The most commonly used of all dry heat sterilisation methods is the hot air oven method of sterilisation.

### **Moist Heat Sterilisation:**

Moist heat sterilisation is the complete opposite in the sense that it uses hot air that is filled with water vapor, and the moisture plays a crucial role in the sterilization process.

There are several different methods used in moist heat sterilisation. Some of them are:

- Water bath
- Boiling
- Steam Sterilizer
- Pasteurization (Milk)
- Auto Clave

The most frequently used and most preferred form of moist heat sterilisation is the autoclave method of sterilisation

## **THE CLEANING AND STORAGE REQUIREMENTS FOR STERILISATION OF EQUIPMENT**

All items must be stored in a way that maintains their level of reprocessing (e.g. sterile, high level disinfected). Dry, sterile, packaged instruments and equipment should be stored in a clean, dry environment and protected from sharp objects that may damage the packaging. This is essential for instruments and equipment that are intended for use on critical sites and that must be sterile.

Equipment and instrument surfaces should be regularly examined for breaks in integrity that would impair either cleaning or disinfection/sterilisation. Equipment that no longer functions as intended or cannot be properly cleaned and disinfected or sterilised should be repaired or discarded.

## **WHAT RISK ARE THERE WHEN HANDLING SOILED LAUNDRY**

Appropriately managed soiled linen is rarely implicated in the transmission of infections. The consistent use of Routine Practices will almost eliminate risk of cross infection. Policies and procedures should address the collection, transport, handling, washing and drying of soiled linen, including protection of staff and hand hygiene.

Risks can be:

Hepatitis B, HIV the main risk is during the washing and sorting of soiled linen.

Laundry policies should ensure that:

- Laundry area is in a dedicated space
- Laundry equipment is used and maintained according to manufacturers' instructions
- Staff do not consume food or beverages in laundry areas
- Hand hygiene facilities are located in all laundry work areas
- Gross soil is removed before washing and proper washing and drying procedures are used
- Cloth linen bags are washed after each use and can be washed in the same cycle as the linen contained in them
- Clean laundry is sorted, packaged, transported and stored by methods that will ensure their cleanliness and protect them from dust and soil

All linen that is soiled with blood, body fluids, secretions or excretions should be handled using the same precautions.

- Bag/contain contaminated laundry at the point-of-care.
- Handle contaminated laundry with minimum agitation and shaking to avoid contamination of the air, surfaces and persons.
- Contain wet laundry before placing in a laundry bag e.g. wrap in a dry sheet or towel. 'Double bagging' is not necessary or recommended.
- All caregivers and laundry workers should be educated regarding the use/disposal of sharps when placing soiled linen in laundry bags. Workers are at risk from contaminated sharps and broken glass when sorting linen in the laundry area.
- Soiled linen should be held away from the body and uniform.
- If a laundry chute is used for soiled linen, it should discharge directly into a soiled linen collection area. The linen placed into the chute must be securely bagged and tightly closed. Linen chutes should be cleaned on a regular (i.e. monthly) basis with a diluted germicide compatible with the laundry process.
- Laundry carts should be cleaned and disinfected with a low level disinfectant daily.
- Clean linen should be covered during storage and transport to protect it from contamination.

## LEGISLATION RELATING TO WASTE MANAGEMENT

The Environmental Protection Act, the Waste Management Licensing Regulations<sup>5</sup> and the Pollution Prevention and Control (England and Wales) Regulations<sup>6</sup> provide the legislative framework for waste management activities. These regulations specify, through waste management licensing and related exemptions and pollution prevention control permits, how waste should be managed and specific conditions that sites must adhere to. Waste management licences and permits are required for the storage, treatment and disposal of many different types of waste.

The Waste Electrical and Electronic Equipment<sup>7</sup> (WEE) Directive is European environmental legislation, which came in to force in January 2007. The WEEE Directive aims to both reduce the amount of electrical and electronic equipment being produced and to encourage everyone to re-use, recycle and recover it.

- Waste Management Licensing Regulations
  - Landfill Regulations
  - Hazardous Waste Regulations<sup>10</sup> (as applicable to England, Wales and Northern Ireland) and Special Waste Amendment (Scotland) Regulations<sup>11</sup>
  - List of Waste Regulations
  - Controlled Waste Regulations<sup>12</sup>
  - Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations (the Carriage Regulations)<sup>13</sup>
  - Control of Substances Hazardous to Health (COSHH) Regulations<sup>14</sup>
- OTHER  
LEGISLATION

## WAYS YOU SHOULD DISPOSE OF WASTE

All contaminated re-useable devices must be handled, collected and transported in a manner that avoids cross-contamination to other persons, equipment or facilities.

Re-useable devices should be separated from clinical waste, and sharps should be removed and placed into approved containers at the point of use. Follow workplace policy and procedures for disposing of waste.

### What are sharps?

The Regulations define sharps as 'objects or instruments necessary for the exercise of specific healthcare activities, which are able to cut, prick or cause injury or infection'. This includes equipment such as needles, blades (such as scalpels) and other sharp medical instruments

Personal protective equipment for the employee at risk where there is a risk of injury and/or infection from the use of sharps. Disposable gloves should be worn for all activities that carry a risk of exposure to blood or body fluids. Although a sharp instrument can easily penetrate a glove, the wearing of a disposable glove greatly reduces the risk of transmission of infection to the injured employee<sup>3</sup>

### Sharps boxes must:

- Have a dedicated handle;
- Have a temporary closure mechanism, which must be employed when the box is not in use;
- Be disposed of when the manufacturers' fill line is reached; and
- Be labelled with point of origin and date of closure.

The employer to provide training relating to risks from sharps to employees who are exposed to the risks.

### SHARP INCIDENTS

The person should run their hand under running water and encourage bleeding to the punctured area for 3 minutes. The GP should be informed of the incident in case any other measures are required.

Accident and incident report must be completed.

### HOW TO REDUCE THE RISK OF SHARPS INJURY IN YOUR WORKPLACE

Follow policy and procedures and do not carry out any task you are not trained to complete or feel competent to complete. Must have proof of training.

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



# Principles of infection prevention and control

'It is our responsibility as employees to take precautionary measures to prevent and control the spread of infection in the workplace; this involves working safely to protect ourselves, other staff, visitors and individuals from infections. Some of the legislation and regulations that relate to the control and prevention of infection include the Health and Safety at Work Act (HASAWA), the Control of Substances Hazardous to Health (COSHH) and the Reporting of Injury, Disease and Dangerous Occurrences Regulations (RIDDOR).

It is important as employees that we are aware of these so that we can work safely; at work we have information provided in the health and safety file and COSHH file. As employees we must ensure we attend all necessary trainings that our employers provide regarding infection control and prevention.

If an employee comes across a hazard such as bodily fluids spilt in an area or a staff member not wearing gloves you must report it immediately to a senior staff member and not ignore it as this may cause infection to spread.

In the workplace employees need to put these safe ways of working into practice; for example by effective hand washing, not coming into work when you're not feeling well as you will be putting others at risk, by not wearing jewellery when cooking or supporting service users in other activities as jewellery carries many pathogens, by always wearing protective clothing; as a support worker wearing an apron and gloves for procedures will reduce the spread of infection by preventing infection passing on from me to others and from getting it on my clothes and spreading it onto another person I come into contact with.

It is also important that all equipment is cleaned correctly to avoid cross infection this is because infection can also spread from one person to another through instruments, linen and equipment.

The employer has a duty to protect, so far as reasonably practicable, those at work who may be affected by work activities.

This involves your employer carrying out a risk assessment to identify and assess the risk.

Your employer is responsible for planning safety, providing information and updating systems and procedures.

The employers responsibility with regards the prevention and control of infection is to supply PPE if the risk to health & safety cannot be adequately controlled in other ways.

You must receive proper training on how to use any PPE provided and your employer should carry out regular checks to ensure it is being used correctly. They should ensure the correct storage of PPE such as gloves. Waste can be a source of infection and needs to be dealt with safely. Employers must have procedures in place to deal with waste materials and spillage to ensure it is dealt with correctly.

Your employer is also responsible in reporting any outbreaks of infection within your workplace, to the Health Protection team and the Care Quality Commission.

## What is meant by infection prevention and control?

Infection prevention and control refers to how infections are prevented or minimised in a setting. This is usually done by having policies and procedures in place to identify and minimise the risk of spreading infections. The purpose of infection control is to reduce the occurrence of infectious diseases.

These diseases are usually caused by bacteria or viruses and can be spread by human to human contact, animal to human contact, human contact with an infected surface, airborne transmission through tiny droplets of infectious agents suspended in the air, and finally, by such common vehicles as food or water.

## The potential impact of an outbreak of infection on the individual and the organisation

Cross infection is one of the main benefactors for infections to break out, following health and safety policies and procedures will help in the prevention of infection.

The changing and disposing of PPE are essential in the prevention of cross infection in accordance with Infection protection and control policy.

**Employees** - If employees catch infection from an outbreak in their work environment, they are likely to be off work and could transport the infection to their friends and families at home. If they are off work, this can have an impact on the staffing levels. If there is an outbreak in the workplace, this can increase the workload and make the work environment more stressful.

**The setting** - If there is an outbreak of infection, this could result in the unit being closed to unnecessary personnel and visitors. If certain personnel are restricted, there may be a reduced service being made available. There are also financial implications because when outbreaks of infection occur, settings will require specialised cleaning which will have an impact on equipment and resources for the service. It will also affect the company revenue if clients cannot use the service

## Current legislation and regulatory body standards which are relevant to the prevention and control of infection.

There are laws and legal regulations about infection prevention and control. Most of the legal regulations relating to infection prevention and control come under the Health and Safety at Work Act; this act is about ensuring a safe work place for employers, employees and members of the public by minimising accidents at work. The Management of Health and Safety at Work Regulations introduced the need for monitoring health and safety and risk assessment; including infection prevention and control.

The Food Safety Act was brought in to ensure safe practices for food to avoid contamination and spreading of infection and includes handling, storing and disposal of food.

Legal regulations that come under HASAWA include The Control of Substances Hazardous to Health (COSHH), this is relevant as it is about the prevention and control of pathogens and managing the safe storage and use of hazardous substances. Reporting of Injury, Disease and Dangerous Occurrences Regulations (RIDDOR) is relevant as it requires that any infection or disease that is work related be recorded and reported.

There are regulatory bodies such as the Health and Safety Executive (HSE), National Institute for Health and Clinical Excellence (NICE) and the Food Standards Agency (FSA) that produce standards to guide and inform infection prevention and control practices.

The HSE is an independent regulator for work-related health, safety and illness; provide information and advice to reduce risks of accidents occurring in the workplace including the spread of infections.

NICE is responsible for providing guidance on the most effective ways to prevent, diagnose and treat disease and ill health. The FSA is responsible for food safety and food hygiene and providing advice on food safety issues.

## Procedures and systems relevant to the prevention and control of infection.

### **Standard Operation Procedures (S.O.Ps)**

Standard Operation Procedures (S.O.P's) can be found in the main office, it covers the health and safety policy along with other legislations and regulatory body standards in accordance to the prevention and control of infection. These policies include instructions of how to carry out 'safe' manual handling , they also include departmental dress codes, health, safety and hygiene codes, the start-up procedures, corrective and preventive actions, cleaning procedures and pest control.

These standards set up by the company will reduce the risk of infections spreading and reduce the risk of hazards occurring. In a working environment that has lots of infectious substances, there are lots of procedures to ensure the risk of these spreading is reduced dramatically, if all policies and procedures are followed to the highest of standards then infections spreading should not occur and all staff will be able to work in a clean and safe environment.

One important S.O.P procedures involves personal protective equipment (PPE) to eliminate the possibility of cross contamination. You must at all times be clean, you must ensure that your hands are washed thoroughly and most importantly after visiting the toilet.

## Roles relating to infection control explain the roles and responsibilities

**Employees** - Employees need to make sure that they follow all the policies and procedures in their work environment and that they report any concerns or omissions to their managers as soon as possible.

**Employers** - Employers need to make sure that they identify any hazards and that they have compiled appropriate risk assessments to reduce the likelihood of incidents occurring. Employers have a responsibility to fund and provide appropriate PPE which is fit for purpose and suitable for all staff. Employers are also responsible for ensuring that the policies and procedures are suitable and up to date, and that all staff are trained and supervised while in the workplace. Employers are also responsible for making sure that they have safe systems of work which fit in with national and local policies and guidelines.

**Specialist personnel** - Specialist personnel are responsible for ensuring that they carry out their specialist role to comply with their own policies and procedures and these must fit in with national and local policies and guidelines. Specialist personnel are also responsible and accountable for the service they provide, and they must make sure that they provide advice and guidance to employers and subsequently employees in the area in which they work

## In relation to infection control the boundaries of the roles and responsibilities

**Employees** - Employees must follow the policies and procedures and make sure that they report any issues or concerns to the manager. They are also responsible for their own actions or omissions.

**Employers** - Employers are responsible for the safety of everyone in the work environment and their boundaries encompass all aspects of safety. They have to make sure that the responsibilities are fully adopted and they can be held legally responsible for any failure.

**Specialist personnel** - Specialist personnel are responsible for the safety of everyone in the work environment and their boundaries encompass all aspects of safety. They have to make sure that the responsibilities are fully implemented and they can be held legally responsible for any failure.

## Some of the records which must be maintained in relation to infection control.

- Risk assessments
- Cleaning schedules
- Information provided to visitors
- Patients'/residents' notes or care plans showing who is infected, type of infection, severity of infection, etc.
- Staff records showing who is infected, type of infection, severity of infection, etc.
- Off-duty rotas
- RIDDOR forms and records
- Forms for notifying local health councils and boards.

## The term risk assessment.

A risk assessment is 'a systematic process of evaluating the potential risks that may be involved in a projected activity or undertaking'. This means it is a process of identifying hazards then looking at the probability of them happening, who may be affected and when. A risk assessment would then be devised to try to minimise the risk of the hazard occurring.

## Potential risks of infection within the workplace.

- Airborne i.e. coughs and sneezes
- Contamination from not washing hands after dealing with other people or toileting.
- Skin to skin contact transferring dirt from human or even animal contact.
- Transfer of Body Fluids through not wearing correct protective equipment.
- Food poisoning through food not being kept at correct temperatures or out of date food
- Staff using the same equipment for different customers
- Staff wearing ties which could dangle down an
- Staff not changing gloves and aprons appropriately
- Staff not using the required PPE or the wrong PPE for the task
- Visitors not washing their hands or using sanitising-gel before entering the environment
- Domestic staff using the same cleaning equipment for cleaning contaminated areas.

## The circumstances that are classified as 'high risk'.

Circumstances which are classified as high risk would be those which had a greater chance of occurring or having a more detrimental effect on people. For example:

- Not washing your hands after going to the toilet, touching someone, carrying out personal care, , etc.
- Leaving ready-to-eat food sitting out, uncovered in a warm environment, e.g. cream cakes, egg sandwiches, someone's meal, etc.
- Using the same equipment for people e.g.
- Not using gloves or changing gloves between tasks
- Using the same apron across different tasks etc.

## What is the importance of carrying out risk assessment?

The main aim is to make sure that no one gets hurt or becomes ill. Accidents and ill health can ruin lives, and can also affect business. Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard. It may also apply to situations with property or equipment loss. The risk is the chance, high or low, that somebody could be harmed by these and other hazards, together with an indication of how serious the harm could be. Factors that influence the degree of risk include:

- how much a person is exposed to a hazardous thing or condition,
- how the person is exposed (e.g., breathing in a vapour, skin contact),
- How severe are the effects under the conditions of exposure.

## The process of carrying out a risk assessment

- Identify the hazards: trailing wires, unsecured rugs, , broken equipment ect.
- Decide who might be harmed and how, the Customer, myself and colleagues, any other official body entering the property.
- Evaluate the risks and decide on precaution,
- Record your findings and implement them, contact relevant organisation to come and repair damaged or broken property and put sign on it to warn others.
- Review your assessment and update if necessary.

## Ways to minimise risk in a workplace setting.

- Working as a role model by having and demonstrating good, safe practices at all times
- Training for staff so that they are aware of any dangers and know how to use PPE effectively.
- Reviewing and evaluating risk assessment
- Having policies and procedures in place to assist staff
- Ensuring that there are sufficient resources, e.g. soap, disposable hand towels, gloves, aprons, etc.
- Having appropriate cleaning schedules and routines

## How are the outcomes of risk assessments communicated to other employees?

- All risk assessments are stored in a folder in the office for staff to read
- Staff must sign to say they have read and understood all new documents such as risk assessment updates
- Any new risk assessment or outcome is discussed at staff meetings
- Updates are provided at every shift hand-over

- May be discussed at support and supervision
- Training sessions.

### Standard infection control procedures include

- Effective hand washing by staff and others is the single most important infection control measure and should be carried out after every contact
- Disposable gloves and plastic aprons should be worn where necessary
- Cuts and abrasions or skin lesions (broken skin, eczema and psoriasis) should be covered by waterproof dressings
- Blood and body fluid spillages should be dealt with immediately and cleaned with appropriate cleaning materials
- Sharps should be disposed of into an appropriate container
- Clothing and bedding should be handled appropriately and machine washed at appropriate temperatures
- Contaminated waste should be dealt with appropriately
- Eyes, mouth and nose should be protected from blood splashes

### Types of equipment used to implement standard precautions.

- Hot water and soap (preferably anti-bacterial soap)
- Paper hand towels and bins with non-touch lids
- Disposable gloves suitable for each individual task as required by PPE policies
- Disposable aprons (colour-coded for the task required)
- Colour-coded cleaning equipment
- Linen gowns, masks, goggles, etc.

### Correct techniques for:

#### Hand washing:

- Remove watch and roll up sleeves, if you have long sleeves
- Wet hands with hot, running water
- Apply soap to hands
- Wash hands in the following order:
  - Rub palm to palm
  - Rub right hand over the back of the left hand and then left hand over the back of the right
  - Rub hands palm to palm but this time with fingers interlaced together
  - Rub the back of the fingers
  - Rub the base of each thumb
  - Rub around wrists
- Rinse hands thoroughly with hot running water

- Dry with a paper towel making sure you dry all areas of the hands and wrists

#### **Handling sharps:**

- Never remove plastic sleeve/cover until ready to use the needle
- Only use needles once
- Never re-cover a needle
- Never try to bend a needle for use
- Always carry needles and injections on a covered tray
- Never leave needles lying around
- Always dispose of used and open needles in a Cin-bin
- Only fill Cin-bins to two thirds full
- Never attempt to remove needles from Cin-bins
- Store and dispose of Cin-bins as per policy

#### **Using personal protective equipment:**

- Only use recognised PPE provided by your employer
- Make sure you have the correct size so that the PPE fits properly e.g. gloves are in different sizes
- Only use the PPE as per instructions
- Change PPE as required e.g. disposable gloves should only be used once and changed between tasks
- Apply and fit PPE as instructed, in the correct order, as trained to do e.g. hat first
- Dispose of PPE as per policy only
- Remove PPE as instructed and trained e.g. roll gloves inwardly.

### **What action needs to be taken when?**

#### **Using colour coded equipment:**

- Only use the equipment as instructed
- Follow the colour-coding policy
- Never mix use of equipment
- Clean equipment after use
- Return to safe storage after use

#### **Carrying out cleaning duties:**

- Follow the cleaning schedule
- Use proper cleaning equipment for the task in hand
- Use PPE as required for each task
- Use cleaning agents appropriate to task
- Only use recognised cleaning agents
- Clean all equipment once finished

- Return equipment to safe storage

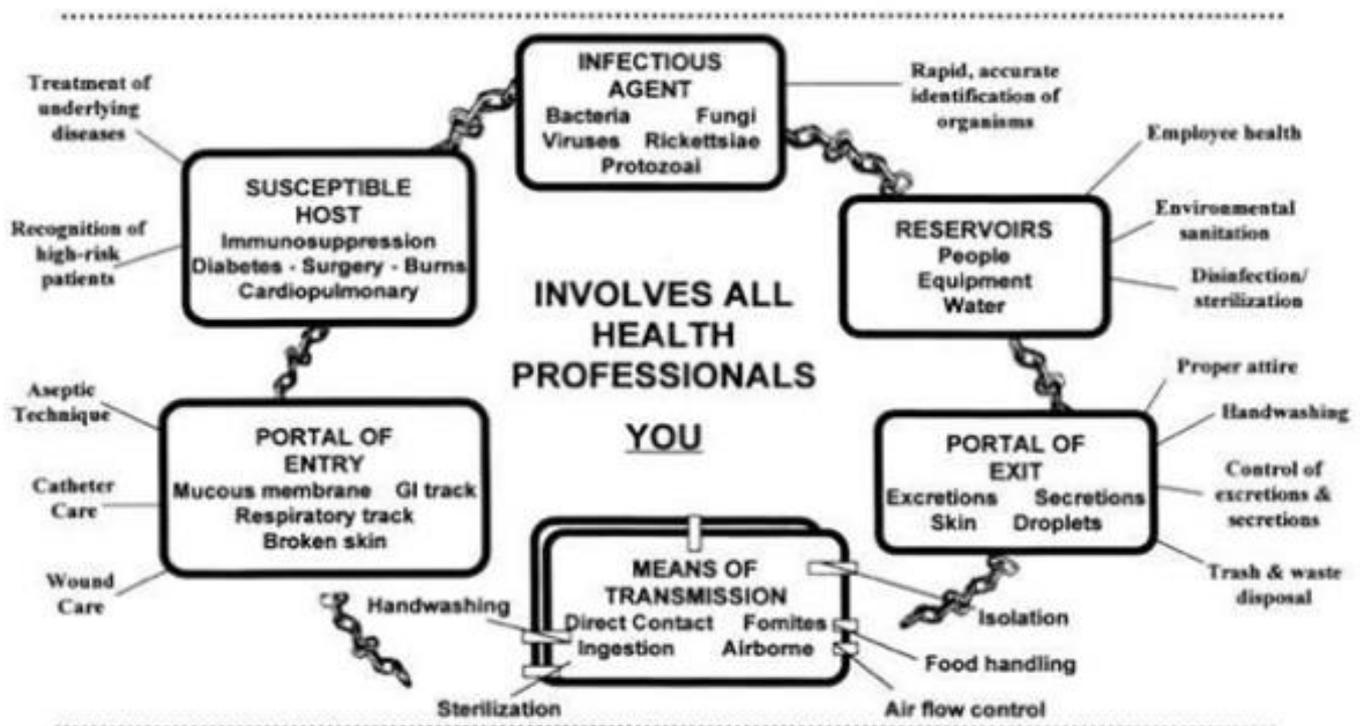
### Storing and disposing of waste:

- Follow company's policies and procedures for storing and disposing of waste
- Use recognised storage facilities
- Make sure that waste storage facilities are kept clean
- Make sure that storage facilities are secure for other people, pets, vermin, etc.
- Never over fill containers or bags
- Make sure that all containers or bags are sealed.

### Managing spillages:

- Clean up all spillages as quickly as possible
- Use signs to warn others of spillage and danger
- Use recognised cleaning materials
- Follow manufacturer's guidelines on use of materials and agents
- Use appropriate PPE when cleaning up spillages
- Inform manager and others of what has been spilt.

## BREAKING THE CHAIN OF INFECTION



# Guidance for employers and businesses on coronavirus (COVID-19)

## What you need to know

Businesses and workplaces should encourage their employees to work at home, wherever possible

If someone becomes unwell in the workplace with a new, continuous cough or a high temperature, they should be sent home and advised to follow the advice to stay at home

Employees should be reminded to wash their hands for 20 seconds more frequently and catch coughs and sneezes in tissues

Frequently clean and disinfect objects and surfaces that are touched regularly, using your standard cleaning products

Employees will need your support to adhere to the recommendation to stay at home to reduce the spread of coronavirus (COVID-19) to others

Employees from defined vulnerable groups should be strongly advised and supported to stay at home and work from there if possible

## It's good practice for employers to:

Keep everyone updated on actions being taken to reduce risks of exposure in the workplace

Ensure employees who are in a vulnerable group are strongly advised to follow social distancing guidance

Make sure everyone's contact numbers and emergency contact details are up to date

Make sure managers know how to spot symptoms of coronavirus (COVID-19) and are clear on any relevant processes, for example sickness reporting and sick pay, and procedures in case someone in the workplace is potentially infected and needs to take the appropriate action

Make sure there are places to wash hands for 20 seconds with soap and water, and encourage everyone to do so regularly

Provide hand sanitiser and tissues for staff, and encourage them to use them

## Symptoms

The most common symptoms of coronavirus (COVID-19) are a new, continuous cough or a high temperature.

For most people, coronavirus (COVID-19) will be a mild infection.