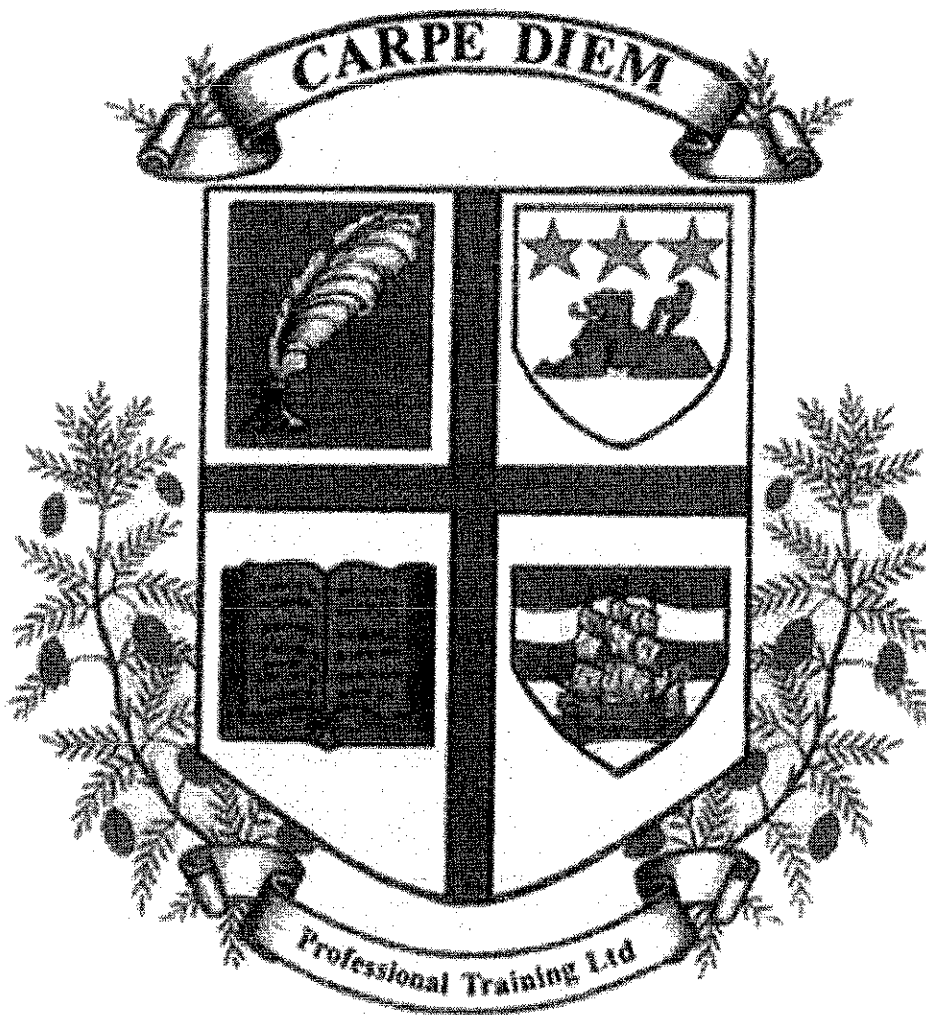


Complete Training *(Inverclyde) Ltd.*



PRINCIPLES OF INFECTION
CONTROL IN A CARE SETTING

Reference Pack

Complete Training (Inverclyde) Ltd ©
7 Benview Ave, Port Glasgow PA14 5SJ
Office Number: 01475 794754 Fax:01475 794754
E-Mail: completetraininginverclyde@ntlworld.com

Prevention of Infection

It is extremely difficult to prevent infections spreading in communities or environments where people live and work together, sharing facilities and equipment. In order to appreciate how to prevent infections we need to be aware of micro-organisms, what they are and how they spread. Micro-organisms can be divided into bacteria, viruses, fungi and parasites.

Micro-organisms are present everywhere in the world. They live on and in man, animals, birds, fish, vegetables and soil. Many are harmless and others are helpful e.g. assisting in the digestion of food in the bowel. The fermentation of beer or wine and production of yoghurt all require micro-organisms.

Micro-organisms, which causes disease, are known as pathogens. It is possible for a micro-organism to be harmless in one part of the body, i.e. the bowel, but to cause infection if it is transferred to another part of the body, e.g. in the eye.

Type of micro-organisms that cause infection include:

Bacteria e.g. *Staphylococcus aureus*, *E. coli*, *Streptococcus*, *Klebsiella*

Viruses, e.g. *Herpes Zoster* (chickenpox and shingles), *Hepatitis Influenza*

Fungi, e.g. *Tinea Pedis* (Ringworm)

Parasites, e.g. Malaria

All micro-organisms require suitable conditions to thrive

- Food
- Water
- Optimum temperature
- Oxygen (aerobes) or no oxygen (anaerobes)

Micro-organisms also need a mode of entry in order to enter a person/animal/food source and multiply.

How infection is spread

This may be through one of the following routes:-

1. Airborne spread

Micro-organisms are coughed or sneezed and then inhaled by those in the same room or area. This route can infect large numbers of people very rapidly.

2. Direct contact

Person to person contact with an infected person or someone who is developing an infection but is not yet aware of it can lead to the contact becoming ill. Good hygiene precautions can reduce the risk.

3. Indirect contact

Surface or items of care equipment may be contaminated by blood or body fluids that can pose an infection hazard if hygiene practices are poor. The use of protective clothing and thorough hand washing will reduce the risk.

4. Food borne spread

Raw foods, especially meat, poultry, eggs and fish are often heavily contaminated with micro-organisms. Transfer of germs from raw to cooked items is a major cause of food poisoning. Hand washing, hygienic practices and careful cooking can reduce the risks.

5. Inoculation spread

If a needle, razor or lancet that is contaminated with blood from someone with an infection causes an injury to someone else, then micro-organisms may enter directly into the injured person's body resulting in transmission of infection.

Preventing infections spreading

There are times when a resident or member of staff is not well and it is appropriate to stay in bed. There are other instances where the client or staff member may not feel as ill – but the person(s) could post an infection risk to fellow residents and/or care colleagues.

Staff should ensure that they comply with food handling legislation and do not resume duties until they have been symptom-free for 48 hours if they work with vulnerable clients (see outbreak guidance).

Residents who are actively vomiting, having profuse diarrhoea and incontinent, should not be using communal dining or sitting rooms. The affected person should be cared for in their bedroom/bathroom and (if available) a designated sitting room. This is known as "source isolation" precautions. It can be extremely challenging to ensure that a confused resident does not wander into other areas and may require one to one supervision by a care assistant. Risk assessment should be undertaken in consultation with the Infection Control team and documented in the client's care plan.

Very weak residents who have pre-existing medical problems and have increased susceptibility to infections, may also need to be cared for in designated areas during outbreaks of infective illness. This is "protective isolation" and is implemented to try to minimise risk of cross-infection.

There will always be some residents or staff working or living in an institution who are not aware of having an infection. Good personal hygiene standards are therefore extremely important in protecting both vulnerable clients and staff.

Common risk factors for infection:

- Frail older people
- Previous attacks of serious infection
- Prolonged or intense exposure to a source of infection

- Malnutrition or obesity
- Poor personal hygiene, incontinence, general debility
- Immune suppression by therapy or disease
- Recent or current antibiotic therapy (reducing normal bacterial colonisation and allowing resistant organisms to replace them)
- Break in skin
- Catheterisation
- Smoking
- Metabolic disorders such as *diabetes mellitus*
- Malignant disease

The above are common risk factors that staff need to be aware of. A good time to assess these risk factors is when a person moves into or out of the home and during transfer to hospital.

Protective clothing for staff

Why? Contaminated clothing can spread infection. If used correctly, protective clothing can prevent such spread and also protect the wearer from infection.

When? Single use disposable plastic aprons should be used for all activities that may result in contamination of clothing with blood, body fluids or excreta. The apron should be discarded and hands washed between dealing with different residents and before any other activity.

Gloves: Single use disposable vinyl gloves should be worn when giving personal care and dealing with body fluids. When dealing with blood spills or infection gloves made of a stronger material such as latex or nitrile (if the staff member is latex – sensitive) should be used. Re-useable “domestic type” heavier duty rubber gloves are provided to protect the skin when handling chemicals or washing up.

Disposal: Disposal gloves and aprons should be disposed of as per policy of the home. If dealing with infection items should be disposed of as clinical waste.

Uniforms: Overalls, boiler suits or other clothing are usually provided for workers in gardens, laundries, kitchens and cleaning services. These uniforms should be removed when not on duty and staff must ensure that they do not enter “clean” areas such as kitchens, wearing items which might be soiled e.g. overalls worn when handling waste or soiled clothing.

Standard Infection Control Practices

(Incorporating "Universal" blood and body fluid precautions)

The government issued revised Guidance for Clinical Health Care Workers. Protection against Infection with Blood-borne Viruses These are now considered to be standard infection control practices.

These (in **bold type**) summarise the general measures, which help to reduce the risk of exposure to blood-borne viruses:

- **Washing hands before and after contact with residents.**
This means personal care contact, not handing a cup of tea to someone with any known infection.
- **Washing hands before and after wearing any gloves.**
This is important because gloves makes the hands sweat and bacteria present on the skin can multiply in the warm environment of a glove. Hands may be more "dirty" in micro-biological terms after removing gloves than before putting them on.
- **Changing gloves between attending residents.**
This is to reduce cross-infection from one person to another.
- **Covering any wounds, skin lesions or breaks in exposed skin with waterproof dressings. Using gloves if hands have extensive skin damage.**
Staff need to be protected from infections entering the body through damaged skin. Residents need to be protected from staff spreading infections from infected wounds or skin lesions.
- **Wearing gloves when contact with blood is anticipated.**
This includes assisting medical staff to obtain a blood sample or giving simple first aide, e.g. dealing with a nosebleed or cut.
- **Minimising the use of "sharps" and where it is essential to use them ensuring safe handling and disposal.**
Lancets for measuring blood sugar and diabetic residents and razors for shaving are the most common "sharps" in community care. Appropriate disposal boxes should be available, correctly assembled, not filled beyond the indicated level and disposed of on a weekly or monthly basis (depending on the service) to comply with Waste Regulations (7).
- **Not wearing open footwear in situations where blood might be spilt or sharp instruments handled.**
There are few situations in nursing and residential homes where blood might be spilt except when a blood sample is taken from a resident.
- **Cleaning up blood spillages promptly and disinfecting surfaces appropriately. Wearing gloves when cleaning soiled equipment prior to**

disinfection, when handling chemical disinfectants or cleaning up spillages.

All staff should receive induction training in cleaning and disinfectant products, and know how to deal with blood spills. This is essential to try to ensure correct action is taken in staff or resident accidents.

- **Disposing of contaminated waste appropriately.**

All staff need instruction in correct segregation and disposal of contaminated waste.

- **Gloves: Wearing gloves does not replace the need for hand washing.**

Damaged vinyl gloves usually tear and allow fluid penetration that alerts the wearer to the hole, however latex gloves can have microscopic holes without the user being aware of them. Latex being an elastic substance will self-seal small holes, but there is the possibility of transfer of minute quantities of blood or body fluid onto the skin of the glove wearer. (There are some special latex gloves available for theatre staff which have a colour change indicator if torn but these are not yet generally available or appropriate for care home).

- **Damaged or infected skin should be protected.**

Cover burns, cuts or septic spots with a waterproof impermeable dressing. Wear fresh disposable gloves if dealing with blood and body fluids or handling food.

- **Communal pots of hand cream are an infection control hazard.**

Tubes or pump dispensers of a quality non-ionic hand cream help to preserve the skin's elasticity and waterproof qualities.

- **Nailbrushes can damage the nail bed and lead to infection.**

Residents should have their own nailbrush if required and these should be regularly cleaned and stored dry. Disposable nailbrushes should be available in the kitchen for use only if the staff member has visible dirt under the nails.

- **Training: Hand washing needs to be taught at staff induction sessions, regularly audited and refresher sessions provided.**

Training sessions should be provided and attendance recorded for all carers, food handlers, domestic staff and regular support staff, e.g. laundress or handyman. All visiting healthcare staff (nurses, doctors, chiropodists, dentists, etc.) should be invited to wash their hands prior to attending a resident and after delivering care to the person. To comply with best practice (8) alcohol hand rub should also be available to use if hands are not visibly soiled or as an extra precaution during an outbreak of illness.

Wrap, bag and bin it instructions

Wrap it

Wrap garment or appliance in an old newspaper if it is very wet or soiled. This helps to contain the leakage. Leaking bags can attract flies and animals.

Bag it

Place the paper parcel in an old plastic carrier bag or disposal sack. If no individual bags are available, use one dustbin bag inside another one to protect your wheelie bin or bucket.

Bin it

Put your bag with waste inside into a bin and keep the lid securely shut. Rats, foxes and stray dogs may tear bags open. Torn bags are a hygiene risk to waste disposal collectors and cleaners. Please dispose of waste items thoughtfully and help keep your community safe.

Remember

Always wash your hands after handling waste of any type and before going on to another task e.g. cooking

Introduction

The purpose of this leaflet is to tell patients and their carers about the different types of waste produced in the home, and how it should be disposed of.

Separation of Waste

Proper separation of different types of waste is critical to safe management and helps control disposal costs. Wastes need to be sorted at the point of origin so they can follow appropriate routes for treatment and/or disposal.

Types of Waste within the Home Setting: Household and Clinical

1. Household Waste

Examples of waste from the home that can be disposed of as household waste includes:-

- Sanitary towels, tampons
- Nappies
- Stoma bags
- Continence garments etc.
- Feeding tubes
- Plastic items from medical treatment (peritoneal dialysis, used dressings, swabs etc.)

Although these wastes may carry 'bugs', generally the waste will not be considered as either infectious or clinical waste. Providing this waste is adequately wrapped (See Wrap, Bag and Bin it instructions and liquid well-contained and absorbed e.g. by newspaper, it may be placed into the domestic waste.

If you have a large amount of domestic waste a larger or additional wheelie bin may be available upon request from the local cleansing department.

2. Clinical Waste

Examples of waste generated within the home that must be disposed of as clinical waste includes:-

- Large quantities of blood e.g. from renal treatment;
- Items used to dispose of faeces from patients where the General Practitioner or Consultant in Public Health Medicine has identified the faeces as potentially infectious;
- Items used to collect drainage from body cavities via drainage tubes;
- Items used to collect respiratory secretions from patients with untreated acute pulmonary tuberculosis which may still be infectious;
- "Sharps" e.g. needles and syringes, novapen needles, broken glass ampoules, empty bottles and cartridges of insulin and blades. Diabetic patients will be issued with special "sharp" bin or container and these can be exchanged in the local Health Centre or Clinic.

A healthcare worker involved in your home care will help you decide whether the waste is clinical or not.

Special Uplift for Clinical Waste

A healthcare worker will arrange a special uplift for clinical waste. You or your carer will receive full instruction on how to use and secure the waste and a written reminder of when the waste will be uplifted. Clinical waste must be stored in a secure location prior to uplift. If more than 2 bags/containers are filled in a week then a lockable yellow wheelie bin will be provided.

The healthcare worker will review the waste generated at regular intervals. Where it is no longer thought to be clinical waste then you will be told when the special uplifts will cease.

INFECTION CONTROL

What causes infection?

Infection occurs when a germ enters the body and causes disease.

How is it spread?

Through broken skin

Through the nose by breathing germs from the atmosphere

Through the mouth through infected food or unclean hands

Sexual contact

What can you do to reduce the risk?

It is important in order to protect yourself and your client from infection, to follow the guidelines below:-

- Wash your hands after visiting the lavatory, before and after handling food, after changing the bed, handling pets or disposing of waste.
- Wash your hands before and after each person you care for.
- Keep nails short and clean.
- Wear gloves and protective clothing when advised to do so.
- Wear clean clothes.
- Cover any open wounds.
- Tie hair back when cooking, preparing food or working closely with clients.
- Wash fruits and vegetables thoroughly.
- Keep kitchen and bathroom surface and equipment clean.
- Keep food hot or cold, lukewarm food encourages the growth of bacteria.
- Dispose of rubbish correctly.
- Clear up any spilt food or fluids immediately.
- If you have an infectious illness such as influenza, diarrhoea and sickness, stay away from work until the symptoms have passed. Always use a handkerchief when you need to cough or sneeze. Please remember to inform your Manager in good time if you are unable to report for work.
- When a client has recently been discharged from hospital it is advisable to wear protective gloves and apron to reduce the risk of multi-resistant *streptococci* anti-bodies (MRSA) spread.

Chemicals and Dangerous Substances

Company employees are required to ensure the health and safety of themselves and others directly affected by their actions. As such, proper regard and attention must be paid to the use, storage and handling of any substance which, if misused, could represent a danger to health and safety

The Control of Substances Hazardous to Health Regulations 1994 (COSHH) requires employers to assess the risk of their employees and other people from

substances used at work. You must follow the policy of the company in order to protect yourself and your client's.

Most household products, which you are likely to encounter in a client's home, do not represent a significant risk provided the products are used and stored in accordance with the manufacturer's instructions.

Be careful with:-

- Alcohol
- Cosmetics
- Detergents
- Cleaners
- Medicines
- Pesticides
- Insecticides

Uniform Approach

Key Points for Nursing Staff

The professional image presented by you is an important component of the way in which you, and, importantly, nursing in general is regarded by colleagues, patients and the wider public. It is also important factor in combating the spread of infection in health care environments.

Always remember:-

- Wear a clean and freshly laundered uniform each day.
- Use any changing and laundry facilities provided by your employer or lobby for them to be provided.
- Do not wear wristwatches or jewellery, especially rings with ridges or stones.
- Keep nails short, clean and polish free. You should not wear artificial nails.
- Wear your hair neatly, off the collar, and in a style which does not require frequent readjustment.
- Change out of your uniform at the end of your shift.
- Do not enter commercial premises, such as shops, in your uniform.

Infection Control Checklist

Standard precautions underpin safe protection and should be used at all times with every patient. Use the following checklist to guide you.

Have you washed your hands?

Hand washing is the single most important step in reducing the spread of disease. Use the six step technique before direct contact with patients and after any activity that contaminates the hands. Dry thoroughly afterwards, using disposable towels.

Do you need to use personal protective equipment?

Carry out a risk assessment if potential contamination by blood or body fluid is likely. Use disposable gloves, aprons, masks, goggles or visors to protect yourself and your patient from these risks of cross-infection and when handling these substances or hazardous chemicals and some pharmaceuticals.

Are you preventing sharps injuries?

Keep handling to a minimum and never re-sheath. Dispose of sharps carefully in a special container at the point of use.

Are you disposing of waste safely?

Ensure that you have been instructed in how to dispose of waste safely, including the colour coding of bags used for different types of waste.

Do you deal promptly with spillages?

Spillages must be dealt with quickly, using appropriate chemical disinfectants as necessary. Ensure you have a thorough knowledge of chemical disinfectants.

Do you scrupulously decontaminate equipment?

Meticulously clean, disinfect and sterilise re-usable equipment, as appropriate, to ensure it is safe for future use.

Are you maintaining a clean environment?

Ensure your workplace has a regularly planned, written and monitored cleaning schedule, which details both the items and environments to be cleaned and how often this should happen.

Do you know what to do in the event of an accident?

Attend the injury, washing it well in cold running water. If bodily fluids have splashed into eyes, irrigate with cold water. If they have splashed into a mouth, do not swallow and rinse out several times with cold water. Report the incident and seek expert advice.

And finally do you know your workplace's procedures?

Ensure that you understand and follow your workplace's written policies and procedures on all aspects of infection control.

How Direct Infection Can Be Spread

Organisms must enter the body if they are set up a disease. In other words, they must be transmitted: the main ways in which this is done through direct infection are explained below:-

Droplet Infection – Example of Colds and 'Flu

Organisms which are present in the upper air passages are expelled into the air when we speak, and especially when we sneeze or cough. Anyone standing or working nearby can easily inhale these droplets. In this way, infection can be easily spread by being close to the infected person, because there is direct contact with the infected droplets. In some cases the infected droplets can contaminate dust and inhalation of this can also cause infection. Fortunately, most organisms soon die outside the body; an important exception is the bacteria causing tuberculosis, which can remain alive in dust for many months. Most people develop acute infectious diseases, (measles, whooping cough, diphtheria, etc.), this way through the respiratory (breathing) tract.

Touching – Example of Food Poisoning

Infection may spread through handling articles which have become infected with the organism, e.g. clothes, bedlinen, crockery, food etc. Neglect in washing the hands thoroughly is very likely to spread infection from an individual to a carer, or carer to individual. An infecting organism may be present in faeces and urine, therefore, hand washing is essential after all tasks, to prevent transmission, and to minimise the risks of food contamination. Strict standards of personal hygiene are a must for all carers. If personal care tasks are being carried out, suitable protective clothing should be worn: not only are you protecting the individual from any risk from you, the carer, but also protecting yourself from infection from the individual.

Sexual Contact – Example HIV

Certain organisms, such as those causing syphilis and gonorrhoea, require actual bodily contact between the infected person and non-infected person for transmission to occur. Although other viruses may also be transmitted this

way (vaginal, anal, or oral-genital contact), such as *herpes genitalis* and HIV viruses, there is also risk of transmission through the bodily fluids secreted and exchanged during sexual intercourse (semen).

Kissing – Example Glandular Fever

This is an ideal way (from the viral point of view) of passing infection from one person to another; not only is it a way of transmitting germs through droplet infection (by breathing in infected air), but also through bodily fluids (saliva). If a person also has a broken cold sore (herpes simplex), this could also be transmitted.

Blood – Example Hepatitis

Infection may be transmitted through sharing infected needles, using unsterile needles when injecting, through contaminated blood supplies, infection entering a scratch or broken skin.

Methods of Direct Infection

The information below shows the many methods by which infection can enter the body directly.

Through the mouth and fingers

Food and/or water which carry organisms are digested; organisms may also be from fingers which have touched the mouth and been ingested. Examples of infections are:-

- *Campylobacter*
- *E. coli* 0.157
- Eye infections (from touching with fingers)
- Food poisoning
- Herpes
- Parasitic worms
- *Salmonella*
- *Shigella tuberculosis*
- Typhoid fever
- Weils' disease

Through sexual contact

Transmission of infection could be by vaginal, anal, or oral-genital contact. Examples of infections are:-

- Venereal diseases (syphilis, gonorrhoea)
- Genital warts
- Herpes

- HIV
- Thrush

Through bites

These could be from insects, animals or parasites. Examples of infections are:-

- Malaria
- Weils' disease
- Secondary infections caused by the bites

Through the nose

Droplets of moisture carry airborne spores or microbes. Examples of infections are:-

- Common colds and 'flu
- Chicken-pox
- Measles
- Mumps
- Pneumonia
- Scarlet fever
- Tuberculosis
- Typhoid fever

Through the skin

The skin may be broken or unbroken. Examples of infections are:-

- Hepatitis, HIV (through sharing needles)
- Nematode worms, some of which bore through the skin
- Ringworm/athlete's foot, this is a fungal infection
- Tetanus, through a cut or graze

Some bacteria and viruses have more than one way of entering the body. For example, tuberculosis can enter by being present in food and being digested; it can also be transmitted by infected moisture droplets.

Methods of Indirect Infection

Many germs can live for a time outside the body; if these germs are left on objects by infected people, there is a likelihood that others who touch those objects will become infected.

Using the examples below:-

- Decide which daily routines bring you into contact with each of the indirect infection methods
- Decide how this contact may spread infection

Main Indirect Infection Methods

<u>How</u>	<u>Example</u>
Hands	Unclean, unwashed Handling of objects, and handles (on doors, cupboards, etc) Uncovered spots, boils, grazes
Flies/Other Insects	Cross-contaminating food (e.g. settling on uncovered food after being on raw sewage) Cross-infecting through bites (e.g. mosquito) Infecting due to parasites (e.g. malaria)
Mice, rats/ Other Animals	Infecting through bites (e.g. <i>Staphylococcus aureus</i>) Infecting due to parasites (e.g. <i>Cryptosporidium</i>) Infecting through faeces/urine/saliva (e.g. food poisoning, <i>toxocariasis</i>)
Dust	Carries bacteria which could be inhaled Carries some viruses on airborne water droplets Carries fungal spores, etc, which are breathed in, or settle on food
Food and Water	Can be contaminated by sewage, chemicals, pesticides, insects, animals, faeces, urine etc. Could be contaminated due to unwashed, unclean hands Can be contaminated by infected dust Can be contaminated by infected water droplets Can carry parasites
Healthy Disease Carriers	A human carrier of infection causing organisms who shows no signs/symptoms (e.g. food poisoning, tuberculosis, HIV, etc)

How Indirect Methods Cause Infection

There are many ways in which infection can be caused indirectly. In many instances, the cause of the infection can be traced back to poor personal hygiene, poor pest control, and ineffective cleaning methods. All of these come down to human awareness and maintaining high standards.

The information below explains these areas in more detail.

Hands

These handle numerous objects during a day, and can therefore be a site for transmitting infection. They can be involved in personal tasks, in preparing and eating food, in cleaning activities, in disposing of wastes, and in touching other people. This means that high standards of personal hygiene in relation to hand washing is essential to reduce the risk of transmitting infection. In fact, hands should be washed as often as is appropriate to the environment the carer is working in, and the tasks being carried out.

Flies and Other Insects

The habits of insects have a direct bearing on how they spread infection. They are not particular about what they feed on – raw sewage, animal faeces, and other excreta are favourites. From this, they may directly enter a kitchen and land on food, where they will digest and regurgitate the food, whilst also defecating onto it. Following this, in search of other food, they will walk across surfaces, contaminating wherever they make contact. Clearly, limiting the possibility of access of kitchen, and food preparation/serving areas, will minimise the risk of transmission. This is essential throughout the caring environment, because whatever object an insect lands on, this will carry the risk of infection.

Mice, Rats, Other Animals and Birds

All animals carry causes of infection: it could be in the diarrhoea (*Campylobacter* in cats and dogs); it could be in the urine (e.g. Weil's disease in rats) or faeces (e.g. *toxocara* in dogs/cats); in saliva and blood. Each of these could transmit infection: through parasitic worms they may carry in the gut (e.g. tapeworm); they may have other parasites which can cause infections (e.g. fleas, bird mites); they may carry harmful bacteria on their noses (e.g. *Staphylococcus aureus*). The habits of mice, rats, some dogs, cats, birds, urban foxes, etc may mirror some of the habits of insects, such as foraging in sewage and rubbish for food, eating and rolling in excreta. It is therefore very important to ensure high standards of hygiene where domestic animals are concerned, including personal, kitchen and general. Good pest control routines will also minimise the risk of infection being transmitted.

Dust and Dirt

This may carry bacterial spores, which settle on food, or are breathed in on moisture droplets. We carry dust and dirt around on our clothing, shoes and hair; each time we move from one environment to another, we spread the bacteria contained in the dust and dirt, therefore giving them more chance to infect a wider range of people. This is why it is important to wear different overalls when carrying out particular tasks.

How Indirect Methods Cause Infection

There are many ways infection can be caused indirectly. In many instances, the cause of the infection can be traced back to poor personal and food hygiene, poor pest control, and ineffective cleaning methods. All of these come down to human awareness and maintaining high standards.

The information below explains these areas in more detail.

Food and Water – Example Food – *Salmonella*, *E. Coli*, Water – Cholera, Hepatitis A

The diseases which are spread through contamination of food, milk or water are the intestinal infections such as food poisoning, dysentery, tuberculosis.

Professor Hugh Pennington, who investigated Britain's largest outbreak of food poisoning (*E. coli*), during which 20 people died in Lanarkshire (1997), said on the BBC's 'Food Programme' in January 1998: "It is essential that we make improvements to every stage of the food chain ... There are too many unqualified people handling food at each stage of the food chain. It is after all a matter of life and death."

Infection from food can be directly transmitted from the food to the hands, which in turn may contaminate surfaces and objects (cross-contamination). It can also be transmitted by healthy disease carriers.

Healthy Disease Carriers

Some people may be infected with bacteria, viruses or parasites and show no symptoms (e.g. food poisoning, tuberculosis, some venereal diseases). However, they may secrete the bacteria through the skin, breathe it out in moisture droplets, or excrete it in faeces (also with the parasite, above) they may therefore be infecting unknowingly anyone they come into contact with. This could be through poor personal hygiene (e.g. not washing hands after using the toilet, blowing nose, coughing, etc), and then touching surfaces, food, and/or other people, thus transmitting infection.

Any care worker who is involved in food handling should attend training courses specifically for this area. It is highly recommended by the Food Safety Act Amendments (1995), that all food handlers attend a Basic Food Hygiene Course. This should be refreshed at least once a year, as recommendations and legal requirements change.

PREVENTING SPREAD OF INFECTION- LIST OF DISEASES

1. There are **NOTIFIABLE** diseases that are reportable to the Director of Public Health
2. There are also **COMMUNICABLE** infections which should be discussed with the resident's General Practitioner and the Consultant in Public Health Medicine (Communicable Diseases & Environmental Health)

GASTROENTERITIS (DIARRHOEA AND VOMITING)

Disease or Causative Organism	Mode of Transmission	How Long is it Infectious?	Infection Control Precautions	Treatment of Linen	Notes	Notify CPHM (CD/EH)
Diarrhoeal Illness (undiagnosed)	Airborne Hand to mouth Food	Depends of organism but usually until 48 hours after diarrhoea has stopped	Single Room Separate W.C.	Treat as infected		If more than 2 cases occur
Campylobacter	Pet faeces Food Hand to mouth	While diarrhoea persists	Single Room if Incontinent Separate W.C.	Treat as infected	All pets in contact with residents should be examined by vet	Yes
Clostridium Difficile	Hand to mouth Airborne	While diarrhoea persists	Single Room Separate W.C.	Treat as infected	Likely to cause outbreaks	Yes
Cryptosporidium	Water Hand to mouth	While diarrhoea persists	Single Room Separate W.C.	Treat as infected		Yes
Giardia	Water Hand to mouth	Until treated	Single Room if Incontinent Separate W.C.	Treat as infected		Yes
Viral	Hand to mouth Airborne	Variable. May be several days after symptoms resolve	Single Room Separate W.C.	Treat as infected	Very likely to cause outbreaks	If more than 2 cases occur
Gastro-enteritis	Hand to mouth Airborne	Up to 48 hours after symptoms resolve	Single Room Separate W.C.	Treat as infected	Very likely to cause outbreaks	Yes
Small Round Structured Virus (SRSV) – also known as Norwalk Virus	Hand to mouth Airborne	Up to 48 hours after symptoms resolve	Single Room Separate W.C.	Treatment as infected	Very likely to cause outbreaks	Yes
Rotavirus	Hand to mouth Airborne					

Disease or Causative Organism	Mode of Transmission	How Long is it Infectious?	Infection Control Precautions	Treatment of Linen	Notes	Notify CPHM (CD/EH)
Salmonella	Food Hand to mouth	Variable, but unlikely to infect others by 48 hours after diarrhoea stops unless poor hygiene/incontinent	Single Room until 48 hours after diarrhoea stops Separate W.C.	Treated as infected	Retain food samples Organism can be carried in stools for weeks or months after infection	Yes
Shigella	Food Hand to mouth	Variable, but unlikely to infect others by 48 hours after diarrhoea stops unless poor hygiene/incontinent	Single Room until 48 hours after diarrhoea stops Separate W.C.	Treated as infected	Very likely to cause outbreaks	Yes
Bacillus Cereus Food Poisoning	Food	Not infectious	None	No special treatment	Retain food samples	Yes
Clostridial Food Poisoning	Food	Not infectious	None	No special treatment	Retain food samples	Yes
Staphylococcal Food Poisoning	Food	Not infectious	None	No special treatment	Retain food samples Food contamination from infected fingers	Yes

OTHER INFECTIOUS DISEASES

Disease or Causative Organism	Mode of Transmission	How Long is it Infectious?	Infection Control Precautions	Treatment of Linen	Notes	Notify CPHM (CD/EH)
Chicken Pox VZV See also "Shingles"	Airborne Contact with rash	Depends of organism but usually until 48 hours after diarrhoea has stopped	Single Room	Treat as infected	Pregnant staff and visitors who are not immune should avoid contact. CPHM will advise on the management of contacts	Yes
Whooping Cough	Airborne	5 days after start of antibiotic treatment	Single Room	Treat as infected	CPHM will advise on the management of contacts	Yes
Measles	Airborne	4 days after rash appears	Single Room	Treat as infected	CPHM will advise on the management of contacts	Yes
German Measles (Rubella)	Airborne	5 days after rash appears	Single Room	Treat as infected	CPHM will advise on the management of contacts	Yes
Mumps	Airborne Contact with saliva	10 days after symptoms appear	Single Room	Treat as infected	CPHM will advise on the management of contacts	Yes
Conjunctivitis	Direct contact with the discharge	Until 48 hours after treatment	Gloves/no touch technique when dealing with discharge. Personal hygiene	Consider need to treat as infected		No
Hepatitis A	Hand to mouth Food	7 Days after jaundice appears	Single Room Separate W.C.	Treat as infected if faecally soiled	May be asymptomatic but can be severe and prolonged in elderly people	Yes
Mononucleosis (Glandular Fever)	Contact with saliva	Variable – may be several weeks	Care with articles soiled with nasal or throat discharges	Consider need to treat as infected		No
Methicillin Resistant Staphylococcus Aureus (MRSA)	Hand to hand Nasal secretions Airborne Skin scales	Variable	Normal unless contaminated by pus	Simple hygiene measures		

Disease or Causative Organism	Mode of Transmission	How Long is it Infectious?	Infection Control Precautions	Treatment of Linen	Notes	Notify CPHM (CD/EH)
Tuberculosis other than Open Pulmonary Infection	Not infectious		None	No special precautions unless CPHM advises otherwise	Is often reactivation of childhood infection	Yes
Urinary Tract Infection (UTI)	Not infectious Often a faecal contaminant	Variable	Care with emptying urinary catheters	No special precautions		No
Cold Sore (Herpes Simplex)	Direct contact with lesions	Until lesions crusted	Use gloves for handling lesions, feeding or mouth care	No special precautions	"Zovirax" topical cream should be applied as directed	No
Shingles (Herpes Zoster) VZV (Varicella Zoster Virus)	Usually reactivation (of chicken pox) Direct contact with rash Airborne	Until lesions crusted	Single Room at night is ideal but exposure is usually pre-rash, so persons in room already exposed to risk and may be incubating VZV	Treat as infected	Staff, residents and visitors should not be in contact unless immune to chicken pox	If management of case poses difficulties
Impetigo (Staphylococcal)	Direct contact with lesions	Until crusted over	Single Room till 48 hours after antibiotic treatment started	Treat as infected	The bacterium may be carried in the nose of infected resident, other residents or staff	If 3 or more cases
Infected Leg Ulcers	Direct contact with ulcer or discharge from it	While exuding pus	Keep ulcers covered with impermeable or well covered dressings to prevent exudate contaminating surfaces or clothes	Consider need to treat as infected	All leg ulcers carry a range of bacteria. Topical antiseptics do not prevent infection and therefore should not be used unless ordered by a GP or dermatologist. Should only be treated with antibiotics if clinical	No

RESPIRATORY (CHEST) INFECTIONS

Disease or Causative Organism	Mode of Transmission	How Long is it Infectious?	Infection Control Precautions	Treatment of Linen	Notes	Notify CPHM (CD/EH)
Influenza or Influenza-like illness	Airborne	While symptomatic	Single Room	No special treatment	See "immunization"	If influenza is confirmed by laboratory. Otherwise if 3 or more cases
Pneumonia	Unknown	Depends on causative organism	Single Room preferable (essential if 'flu-like illness)	No special treatment	Caused by a range of bacteria and viruses	If 2 or more cases and cross infection is suspected
Pulmonary Tuberculosis	Airborne if untreated or still AAFB + (sputum smear positive) Otherwise not infectious	Normally 2 weeks after starting treatment	Single Room if untreated or still AAFB positive sputum	Treated as infected	CPHM (CD/EH) will advise on the management of contacts (residents and staff)	Yes

SKIN INFECTIONS

Disease or Causative Organism	Mode of Transmission	How Long is it Infectious?	Infection Control Precautions	Treatment of Linen	Notes	Notify CPHM (CD/EH)
Fleas	From pets Person to person	Until treated	If new resident, single room until treated. Treat pets. Launder resident's clothing and bedding	No special precautions but may be desirable to wash separately from other laundry		No
Head Lice	Person to person	Until treated (2 applications of lotion at 7 day interval)	Contacts should be traced and if required treated	No special precautions		If more than 3 cases at same time
Body Lice	Person to person	Until treated	If new resident, single room until treated. Launder resident's clothing and bedding	No special precautions but may be desirable to wash separately from other laundry		No
Pinworms Threadworms	Hand to mouth	Until treated	Personal hygiene	No special precautions	Vacuum room of infected person daily for several days	If 3 or more cases
Scabies	Person to person (close contact)	Until treated	Single Room until treatment completed. Launder resident's clothing and bedding after treatment	No special precautions but may be desirable to wash separately from other laundry	Untreated or the immune suppressed may develop more severe form of scabies = "Norwegian". In this case it may be necessary to treat other residents, staff and family members	If more than 2 related cases

BLOOD BORNE INFECTIONS

Disease or Causative Organism	Mode of Transmission	How Long is it Infectious?	Infection Control Precautions	Treatment of Linen	Notes	Notify CPHM (CDE/H)
HIV/AIDS	Direct contact with ulcer or discharge from it	For life	Strict application of universal precautions including care with sharps	Treat as infected if blood soiled	Resident's GP, consultant and the CPHM will collaborate with management	Yes
Hepatitis B	Contact with infected blood or other body fluids Sexual transmission	Variable, but can be for life	Strict application of universal precautions including care with sharps	Treated as infected if soiled with blood or body fluids	Immunisation of some staff may be recommended	Yes – for adult infection (jaundice) No – for children carrier state
Hepatitis C	Contact with infected blood or other body fluids Sexual transmission	Unknown: Long term	Strict application of universal precautions including care with sharps	Treated as infected if soiled with blood or body fluids		Yes – for adult infection (jaundice) No – for children carrier state