# Lancashire County Council Occupational Health and Safety Management System Corporate Guidance

## Infection Control

This guidance has been developed to help managers and headteachers to assess the risk of infections which may affect its employees, service users and pupils and to suggest how these risks can be managed through preventative and control measures. It also identifies the most common types of infection and details how these infections may be transmitted in addition to any action which may be required to control their spread.

## What does this guidance cover?

- 1. Introduction
- 2. How infections are spread the chain of infection
- 3. Infection control responsibilities of line managers and employees
- 4. Infection control general advice for all employees
- 5. Infection control service users and pupils
- 6. <u>Infection control female workers of child bearing age / pregnant workers / nursing</u> mothers
- 7. List of LCC infection prevention guidance documents
- 8. Common infections
- 9. Useful contacts and information sources

## 1. Introduction

Infection control is an essential factor in fulfilling the county council's duty of care to safeguard the health, safety and wellbeing of employees, service users, pupils and anyone else that may be affected by its work activities.

LCC employees, service users, pupils, members of the public and also contractors working on premises throughout the county, may be at risk by exposure to persons or objects carrying infections and also from cuts, bites, nips and scratches etc. sustained at work.

The county council will take all reasonable steps to raise the awareness of employees to the potential risks of infection to which they may be exposed during the course of their work activities and to ensure that appropriate information and guidance is available to enable employees to deal with these issues.

Back to top

## 2. How infections are spread - the chain of infection Micro-organisms

Micro-organisms (e.g. bacteria and viruses) live in or on some parts of the body (e.g. skin, mouth, intestinal tract) and are known as the body's normal flora. Some of these may cause illness if they find their way into other areas of the body. An example of this

1 of 8

Issue No: 8
Issued by: H&S Team

- is where micro-organisms normally found in the bowel enter the bladder and may then have the potential to cause infection.
- Normal skin flora is known as 'resident' and is there continuously they are essential
  for good health. Resident bacteria rarely cause infection except in special
  circumstances such as during surgery or insertion of catheters and other invasive
  devices. Resident skin flora lives naturally on the skin and is difficult to remove by
  normal hand hygiene techniques, although the numbers of micro-organisms will be
  reduced by this process.
- Many other micro-organisms are acquired or deposited on the skin from other staff or residents or from the environment and are known as 'transient'. These do not live permanently on the skin and are readily removed or destroyed by thorough and frequent hand hygiene.

## The reservoirs of infection

- The reservoirs of micro-organisms may be people, the environment or equipment. The
  human body is the most common reservoir for micro-organisms. A person with
  salmonella, tuberculosis (TB) or hepatitis B may act as a source of infection to others
  because the micro-organisms are present in some of the body fluids and can be
  passed on to others.
- Contaminated food may also act as a reservoir of infection. A common example of this
  is the presence of salmonella spp. If food contaminated with salmonella is not
  thoroughly cooked, individuals who consume it can become infected.
- The environment can also be contaminated by micro-organisms shed by people with an infection. This can then spread to others. Regular cleaning minimises this risk.
- Poorly maintained or incorrectly decontaminated equipment can also act as a reservoir of micro-organisms. For example, inadequately maintained and shared commodes can be contaminated with micro-organisms that cause diarrhoea.

## Point of entry

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

## Point of exit

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

## Method of spread or mode of transmission

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

sneezing near another person may pass on these viruses in the droplets or aerosol produced. Touching your face will contaminate your hands with these viruses.

Back to top

## Modes of transmission include:

- Aerosol;
- Droplet;
- Faecal-oral;
- Direct contact (person-to-person), often by contaminated hands;
- Indirect contact (food, water, fomites [inanimate objects], the environment);
- Blood and body fluid; and
- Insects and parasites.

## Susceptible host

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

- Age (the very young and very old are more vulnerable to infections);
- Immune status:
- Physical well-being;
- Psychological well-being;
- Hygiene;
- Underlying or chronic diseases or medical conditions (e.g. diabetes, chronic chest and heart problems or cancer):
- Other existing infections;
- Medical interventions (e.g. an indwelling medical device);
- Medical therapies (e.g. cancer chemotherapy or steroids).

Back to top

#### 3. Infection control - responsibilities of managers/headteachers and employees

## Managers / headteachers must:

- Ensure local risk assessments (under COSHH) for activities where there is a significant risk and have procedures in place for reducing the risk of cross infection. The risk assessments must then be implemented and all relevant staff must be informed as to their contents and, in particular, the control measures / working practices they are required to follow. Risk assessments must be reviewed periodically and following a related incident;
- Ensure individual risk assessments are carried out on all staff and people using the service who carry infections that are transmitted through blood and bodily fluids such as hepatitis, HIV etc.;
- Ensure that appropriate Personal Protective Equipment (PPE) is readily available when required; such as disposable gloves and aprons and also that employees are aware of the circumstances under which PPE should be used;
- Ensure that employees are aware of the need to cover open wounds such as cuts, scratches, grazes etc. with appropriate dressings when carrying out personal care or when involved in food preparation activities;

- Ensure that appropriate precautions are taken with regard to the cleaning of blood and bodily fluids and the disposal of contaminated waste;
- Ensure that employees raise any concerns immediately to the appropriate line manager;
- Ensure that, where identified by risk assessment, employees have the appropriate immunisations;
- Ensure employees who are known to be suffering from infections, do not expose others to potential risks;
- Ensure RIDDOR reports are completed. Under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) certain infectious diseases, e.g. hepatitis and TB are reportable. Full details of all reportable diseases can be found on the Government's legislation website at Reportable Diseases;
- Outbreaks of minor infections etc. such as diarrhoea and vomiting, flu, scabies, etc., must be reported to the appropriate authority (local Environmental Health, local council) or Health Protection. An outbreak can be defined as "two or more linked cases of the same illness or when the number of cases of the same illness unaccountably exceeds the expected number." Outbreaks of infectious disease may occur from time to time in social care settings, nurseries, pre-schools and schools.

See GOV.UK Outbreak guidance: Schools and childcare settings and care home settings

## **Employees must:**

Employees working with vulnerable people may be at risk of contracting infections from them, and vice versa.

As a general rule, young children and vulnerable adults may be easily susceptible to infections as they may lack immunity, general awareness and good hygiene practices. These groups, particularly children, also interact more closely with each other increasing the risk of the spread of infection. This is especially true of infections spread by direct touch e.g. scabies, or infections spread by coughing or sneezing etc.

- Employees who have young children of their own or who care for elderly or sick relatives may put them at risk from infections they may pick up at work. Where appropriate, immunisation will reduce this risk. All employees should be vigilant for signs of infections within people using the service, especially within residential and respite accommodation where prolonged contact is inevitable.
- Employees should seek medical advice regarding a return to work if they are suffering from an infection which is easily transmitted to vulnerable groups. They should explain the full nature of their work to their General Practitioner (GP) who will be able to provide appropriate advice. In particular anyone suffering from diarrhoea and /or vomiting may need to stay away from work until all symptoms have cleared completely, this may need to be discussed with the appropriate line manager. Employees who attend work when they may be at risk of spreading infection may do more harm than good.
- Anyone suffering from non-infectious diarrhoea and /or vomiting may need to stay away from work until all symptoms have cleared completely. This will need to be discussed with the appropriate line manager. The line manager can speak to the LCC Occupational Health Service for advice or the employee can discuss the matter with

their GP. Food handlers are reminded of their statutory obligations under the Food Hygiene (England) Regulations 2006 to notify the food business operator immediately if they are suffering with a disease likely to be transmitted through food or afflicted, for example, with infected wounds, skin infections, sores or diarrhoea. Examples of diseases include: typhoid fever, paratyphoid fever, other salmonella infections, staphylococcal infections likely to cause food poisoning e.g. impetigo See Food Standards Agency - Food handlers: fitness to work guidance

• If there are any concerns with regard to an infection carried by a particular person using the service, these should be discussed with the appropriate line manager, head teacher, parent/guardian and/or Social Worker etc. Where appropriate, medical advice should be sought. Further advice on infection prevention may be sought through the Infection Prevention team at Public Health within Lancashire County Council – Email: <a href="mailto:infectionprevention@lancashire.gov.uk">infectionprevention@lancashire.gov.uk</a>

Back to top

## 4. Infection control - general advice for all employees

**Standard precautions** are actions taken by staff in order to limit the risk of spread of infection. They protect both staff and the general public, and must be carried out regardless of perceived or known infection risk. These precautions mainly apply to blood and other body fluids, these are widely accepted and practiced nationally and internationally. Due to the fact that it is not always possible to identify people who may spread infection to others, it is important that these precautions must be followed at all times.

## Standard precautions include:

- Hand washing and skin care;
- Protective clothing;
- Safe handling of sharps;
- Spillage management;

Hand washing is the single most important activity for preventing cross infection. How often you wash your hands depends on your risk assessment of the procedure you have just completed and/or are about to start. Routine hand washing removes dirt, organic material and most transient micro-organisms found on the hands. <u>Hand washing technique document</u> available from LCC Infection, Prevention and Control team web site.

Back to top

## 5. Infection Control - service users and pupils

- To ensure the safety and protection of the vulnerable users of the service, it is generally recommended that their immunisations are up to date. However it is acknowledged that in most instances the county council is unlikely to have any involvement in this. Health visitors or GP's should be contacted for further information.
- When parents/guardians etc. have omitted/decided not to update immunisations, particularly amongst children this may have an impact upon employees and other users of the service.
- If a person is not well, it may be more appropriate for them to be at home rather attending services provided by the county council as infections can spread quickly

- amongst vulnerable groups. Any request to exclude a person using the service must be discussed with the appropriate line manager.
- When a user of the service is suffering from vomiting/diarrhoea, it is important, if practicable to exclude them whilst symptoms persist, this should be discussed with the appropriate line manager.
- Certain people using the service may have specific health problems. Parents/guardians etc. should notify the appropriate manager of these as necessary. This information will be treated in the strictest confidence and/or only disclosed to third parties with consent and as necessary.

Back to top

## 6. Infection control - female workers of child bearing age / pregnant workers / nursing mothers

- Female workers of child bearing age should ensure that they are immune to rubella (German measles) and chickenpox as they may be at risk of exposure to these infections.
- A blood test can confirm immunity if unsure of previous vaccination status or exposure to the disease. Such women are advised to seek the advice of their GP regarding this and consider any necessary immunisation e.g. MMR prior to pregnancy.
- Pregnant employees will require additional precautions as certain infections are particularly hazardous during pregnancy or can have serious consequences for the unborn child in particular;
  - <u>Chickenpox</u> can be unusually severe in pregnant women and it poses a threat of congenital defects and death in the unborn child.
  - o <u>Rubella</u> while usually trivial in adults, an infection in early pregnancy can result in congenital defects in the unborn child.
  - Measles because they have low immunity against infectious diseases pregnant women are especially susceptible and the unborn child may also be at risk.
  - Slapped cheek syndrome (parvovirus B19) can result in acute arthritis and in early pregnancy it can seriously affect the unborn child causing miscarriage or other serious complications.
  - <u>Toxoplasmosis</u> is a strain of the toxocariasis infection and is usually found in cats. If the infection is contracted in early pregnancy it can lead to death or deformation of the child. This is not generally an issue within council locations, however, if there are cats in or around the premises pregnant women should avoid handling the excrement, in particular, cleaning any cat litter trays.

Back to top

## 7. List of LCC infection prevention documents and guidance

Further information and guidance is available on the Infection Control pages of the Health, Safety & Quality web site - <u>Intranet</u> and <u>Schools Portal</u>. This includes guidance on:

Dealing with bodily fluids risk assessment;

- Disposal of clinical waste;
- Hand washing technique advice / poster;
- Latex gloves guidance on use;
- Sharps and needle stick injuries flowchart;
- Sharps and needle-stick injuries guidance;
- o Vaccinations against blood borne viruses and other infections;

Related guidance is available on the Health, Safety & Quality site:

- LCC guidance for schools on the prevention, detection and treatment of head lice at Intranet or Schools Portal
- LCC guidance on provision and use of Personal Protective Equipment (PPE) at <u>Intranet</u> or <u>Schools Portal</u>

Back to top

## 8. Common infections

Guidance and advice can be accessed on the Public Health England and NHS Choices web sites. These provide general, brief information about common infections that employees may encounter during the course of their day to day work.

The information on these web sites should not be used as a tool for self-diagnosis or treatment. In all cases if an employee believes they, or a colleague have contracted an infection, medical advice should be sought as soon as possible.

Back to top

## 9. Useful contacts and information sources

- GOV.UK Outbreak guidance: Schools and childcare settings and care home settings
- HSE: <u>Blood-borne viruses in the workplace guidance for employers and employees</u> (indg342)
- Public Health England <u>website</u> or local Cumbria and Lancashire Regional Office on Tel: 0844 225 0602
- Infection Prevention and Control Team, Public Health, Lancashire County Council
  - E-mail: infectionprevention@lancashire.gov.uk
  - Website: <a href="http://www.lancashire.gov.uk/practitioners/health/infection-prevention-and-control.aspx">http://www.lancashire.gov.uk/practitioners/health/infection-prevention-and-control.aspx</a>
- Health, Safety and Quality team:
  - o Email: health.safety@lancashire.gov.uk
  - o Tel: 01772 538877
- LCC Occupational Health Helpdesk Tel: 01772 831818.
- World Health Organisation (WHO) Infectious diseases fact sheets
- NHS Choices website

Back to top