Occupational Health and Safety Management System

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?

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1. Introduction

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

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.

As an employer we 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.

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2. How infections are spread - the chain of infection

Micro-organisms

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

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

The reservoirs of infection

- The reservoirs of micro-organisms may be people, the environment or equipment. The human body is the most common reservoir for 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.

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
- 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, for example, diabetes, chronic chest and heart problems or cancer
- Other existing infections
- Medical interventions, for example, an indwelling medical device such as a catheter or feeding tube
- Medical therapies, for example, cancer chemotherapy or steroids

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

Managers / headteachers must:

- Ensure local risk assessments 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 informed of 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 for 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, such as hepatitis and TB, are reportable. Full details of all reportable diseases can be found on the Government's legislation website at <u>Reportable Diseases</u>.
- 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 UKHSA. 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: <u>Schools and childcare settings</u> and <u>care home</u> <u>settings</u>.

Employees:

If you work with vulnerable people you 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, such as scabies, or infections spread by coughing or sneezing etc.

- If you have young children of your own, or if you care for elderly or sick relatives, you
 may put them at risk from infections that you may pick up at work. Where appropriate,
 immunisation will reduce this risk. You should be vigilant for signs of infections within
 people using the service, especially within residential and respite accommodation
 where prolonged contact is inevitable.
- If you are suffering from an infection that is easily transmitted to vulnerable groups you should seek medical advice regarding a return to work. You will need to explain the full nature of your work to your General Practitioner (GP) who will be able to provide appropriate advice. In particular, if you are suffering from diarrhoea and/or vomiting you may need to stay away from work until all your symptoms have cleared completely. This will need to be discussed with your line manager. If you attend work when you may be at risk of spreading infection you may do more harm than good.
- If you are suffering from non-infectious diarrhoea and/or vomiting you may need to stay away from work until all symptoms have cleared completely. This will need to be discussed with your line manager. Your line manager can seek further advice from the Occupational Health Service, or you can discuss the matter with your 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, such as impetigo. Please see <u>Food Standards Agency - Food handlers: fitness to work guidance</u>.

 If you have any concerns about an infection carried by a particular person using the service, these should be discussed with the appropriate line manager, headteacher, parent/guardian and/or Social Worker etc. Where appropriate, medical advice should be sought. Further advice on infection prevention may be sought through the county council's Infection Prevention and Control team by Emailing: infectionprevention@lancashire.gov.uk.

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4. Infection control - general advice for all employees

Standard precautions are actions taken by employees in order to limit the risk of spread of infection. They protect both you 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. As it is not always possible to identify people who may spread infection to others, it is important that these precautions are followed at all times.

Standard precautions include:

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

Hand hygiene is one of the most important activities for preventing cross infection. How often you wash your hands depends on your risk assessment for 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. A <u>Hand washing technique poster</u> is available on the Infection, Prevention and Control team's website.

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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 service providers are unlikely to have any involvement in this. The individual's health visitor or GP 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 the 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 the 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.

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6. Infection control - female workers of child bearing age, pregnant workers and 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, for example, 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 cause complications for both the pregnant mother and her baby, so you should get medical advice as soon as possible.
 - <u>Rubella</u> while usually trivial in adults, an infection in early pregnancy can result in congenital defects in the unborn child.
 - <u>Measles</u> because they have low immunity against infectious diseases pregnant women are especially susceptible and the unborn child may also be at risk.
 - <u>Slapped cheek syndrome</u> (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.

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7. List of infection prevention documents and guidance

Further information and guidance is available on the Infection Control pages of the Health, Safety and Quality website - <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
- Vaccinations against blood borne viruses and other infections

Other related guidance on the Health, Safety and Quality website includes:

- Guidance for schools on the prevention, detection and treatment of head lice at Intranet or Schools Portal
- Guidance on the provision and use of personal protective equipment (PPE) at Intranet or <u>Schools Portal</u>

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8. Common infections

Guidance and advice can be accessed on the Public Health England and NHS Choices websites. 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 websites 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.

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9. Useful contacts and information sources

- GOV.UK Outbreak guidance: <u>Schools and childcare settings</u> and <u>care home settings</u>
- HSE:
 - o Blood-borne viruses from needlestick injuries in the construction industry
 - o Sharps injuries in health and social care services
 - o Avoiding sharps injuries guidance
- GOV.UK Health Protection: Infectious diseases: detailed information
- Infection Prevention and Control team: Email or website
- Health, Safety and Quality team: Email or Tel: 01772 538877
- Occupational Health Helpdesk Tel: 0330 0085 999.
- World Health Organisation (WHO) Infectious diseases fact sheets
- <u>NHS Choices website</u>

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