

Teignbridge District Council

Policy on Work Related Infectious Diseases

Version 3.0

1. Statement of Policy

Certain types of work may expose employees to infectious diseases. Where the exposure is due to work activities then the employer has both a common law duty of care and a duty under the Health and Safety at Work Act 1974 to protect the employee from infection. Regulation 3 of the Management of Health and Safety at Work Regulations 1999 requires employers to carry out an assessment of the risks to health and safety of their employees. This assessment should also cover the risk of exposure to infectious diseases.

Many people are exposed to infectious diseases (e.g. colds, influenza) by social contact either at home or when travelling to work. This type of infection is unfortunate but is not covered by this policy.

Certain types of work are associated with certain diseases. Appendix 1 lists various types of work and the diseases to which workers *may* be exposed. Appendix 1 is not intended to be exhaustive. It does not, for instance, list health workers (doctors and nurses) for the simple reason that Dawlish Town Council does not employ such workers. Whether any particular worker is exposed to any particular disease will depend on the exact nature of the work and risk assessment should be used to evaluate this.

The Council is concerned to protect its' employees from all risks and this includes work related infectious diseases. Appendix 2 gives more information relating to diseases to which Council employees *may* be (but not necessarily are) exposed.

2. Organisation and Arrangements

2.1 Directors

- as senior officers of the organisation, should ensure that adequate arrangements exist within areas under their control for the assessment of risks. Assessment should include work related infectious diseases.

2.2 Line Managers

if their staff carry out work, which may expose them to infectious diseases, they will :-

- liaise with the Health Safety & Welfare Officer to ensure that risk assessments are carried out for the work under their control and that such assessment adequately address the risk of work related infectious diseases;
- liaise with the Health Safety & Welfare Officer to ensure that, where appropriate, Departmental policies and procedures are in place to adequately control the risks;
- ensure that staff under their control are familiar with this policy and any departmental policies and procedures regarding infectious diseases;
- ensure that staff are aware on the need to report any case of work related infectious disease. Reports should be made to the Health Safety and Welfare Officer.

2.3 All staff

who may be exposed to work related infectious diseases should :-

- ensure that they are familiar with this policy and any departmental policies and procedures on work related infectious diseases;
- take all reasonable precautions and work in accordance with departmental procedures or job instructions in order to protect themselves from infection;

- report any cases of work related disease to the Health Safety and Welfare Officer;
- where the risk assessment shows that exposure to a disease may occur and where immunisation is available, the member of staff should consult their G.P. to determine if such immunisation is desirable in their particular case. At the time of writing no procedure exists for provision of vaccinations paid for by the Council. Where immunisation is desirable this should be arranged through the G.P.

2.4 The Health Safety and Welfare Officer

will

:-

- work with line managers and others to ensure that the Council fulfils its legal obligation to carry out risk assessments and that such assessments adequately identify the risk to employees of work related infectious diseases;
- assist line managers with the development of departmental procedures and where appropriate job instructions in order to minimise the risk to employees of work related infectious diseases;
- keep records of reports of work related infectious diseases.

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Appendix 1

Types of work and associated work related diseases

Only work relevant to Teignbridge District Council is covered here. Not all workers will be exposed to all, or even any, of the diseases listed here. The list is not comprehensive and other diseases may be present

Infection at work with serious diseases is rare and in most cases simple precautions will give adequate control of the risk.

<i>Type of work</i>	<i>Possible exposure to disease</i>
Sewer work including occasional entry for inspection purposes	<ul style="list-style-type: none"> • Hepatitis A • Leptospirosis (Weil's disease) • Escherichia coli, salmonella and a variety of other bacteria and viruses
Refuse collection including inspection of refuse bins	<ul style="list-style-type: none"> • E. coli, salmonella and a variety of other bacteria and viruses • Tetanus • Hepatitis B & C (from needles) • H.I.V. (from needles)
Forestry, work in the Dawlish Brook and waterfowl compound	<ul style="list-style-type: none"> • Lyme disease • Tetanus • Leptospirosis (Weil's disease)
Work with people, litter picking Dawlish Brook	<ul style="list-style-type: none"> • Tuberculosis • Hepatitis B & C (from needles) • H.I.V. (from needles) • Leptospirosis (Weil's disease)
Work involving contact with soil in Dawlish Brook and waterfowl compound	<ul style="list-style-type: none"> • Toxoplasmosis (from cat faeces) • Toxocara canis (from dog faeces) • Leptospirosis (Weil's disease)
Waterfowl and other birds in Dawlish Brook and waterfowl compound	<ul style="list-style-type: none"> • Escherichia coli, salmonella and a variety of other bacteria and viruses • Rabies (not normally present in this country but could be imported) • Tetanus • Leptospirosis (Weil's disease)
Work with dogs and certain other animals	<ul style="list-style-type: none"> • Rabies (not normally present in this country but could be

	<p>imported)</p> <ul style="list-style-type: none">• Toxoplasmosis (from cat faeces)• Toxocara canis (from dog faeces)• Echinococcosis (also known as hydatid disease – from dog faeces)• Microsporum canis (ringworm)
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Appendix 2

Further information on some work related infectious diseases

Echinococcosis

Also known as Hydatid disease, transmission is from dogs to humans through close contact with the dog and particularly with dog faeces. The infective agent is the canine tapeworm *Echinococcus granulosus*.

Tissue damage, notably in the liver or lungs, is due to the development of cysts.

Prevention of infection is by application of good hygiene practices to prevent hand-to-mouth infection and by use of personal protective equipment (e.g. gloves). Immunisation is not an option.

Incidence in the UK is low with 177 work-related infections from 1978 to 1989.

Hepatitis A

This is a viral infection transmitted by contact with human faeces. Sewage or contaminated water may be sources of infection.

Infection may be without symptoms or may result in an acute illness. The symptoms of acute illness are similar to flu in the early stages. Nausea, vomiting, loss of appetite, tenderness in the right upper abdomen, aching muscles and sometimes joint pain. Jaundice, yellowing of the skin and the whites of the eyes, follows. Recovery from the acute infection normally occurs in a few weeks.

Prevention of infection is by application of good hygiene practices to prevent hand-to-mouth infection and by use of personal protective equipment (e.g. gloves). Immunisation with immunoglobulin is available as is a vaccine.

Incidence in the U.K. is about 2,000 cases each year but it is likely that only a small proportion of these are infections at work.

Hepatitis B & C

Hepatitis B and C are blood borne viral infections. For infection to occur blood (or certain other bodily secretions) from an infected person must enter the body of another. Health workers, for instance, are at risk from contaminated sharps (e.g. by being pricked by a hypodermic needle used by a carrier of hepatitis). Apart from blood other bodily fluids which may give rise to infection are cerebrospinal fluid, pleural fluid, peritoneal fluid, breast milk, amniotic fluid, vaginal secretions, pericardial fluid, synovial fluid and semen. Urine, faeces, tears, saliva, sputum and vomit are thought to be minimal risk unless contaminated with blood.

Some people carry the virus without any symptoms at all. In others acute illness gives symptoms similar to those given above (see hepatitis A). In approximately 10% of cases a chronic infection develops and this may progress to cirrhosis of the liver.

Preventative measures involve careful control of sharps, good hygiene measures including control and prompt clean-up of blood spillages and personal hygiene. Avoidance of contact with sharps (e.g. by containment and avoidance of manual handling) is the best option but personal protective equipment has a role to play e.g. in refuse handling. In some cases Immunisation may be appropriate but this is not 100% effective particularly in people over 40 years of age. Immunisation may take up to six months to confer adequate protection.

It is not known how many people in the UK are infected with hepatitis B or C. In recent years there have been approximately 500 acute cases reported each year, but few of these have been occupational infections. Hepatitis can be transmitted sexually and by drug users sharing needles. Data on occupational infection with hepatitis is available from the Health and Safety Executive but unfortunately this does not distinguish between hepatitis A and B + C. In the ten year period from years 90/91 to 99/00 there were 199 cases reported under the Reporting of Diseases and Dangerous Occurrences Regulations. This gives an average of just under 20 cases each year. It is possible that some infections have taken place but given rise to no symptoms. Those most at risk are health workers.

HIV

HIV, like hepatitis B, is a blood borne viral infection. For infection to occur blood (or certain other bodily secretions) from an infected person must enter the body of another. Health workers, for instance, are at risk from contaminated sharps (e.g. by being pricked by a hypodermic needle used by a carrier of hepatitis). Apart from blood other bodily fluids which may give rise to infection are cerebrospinal fluid, pleural fluid, peritoneal fluid, breast milk, amniotic fluid, vaginal secretions, pericardial fluid, synovial fluid and semen. Urine, faeces, tears, saliva, sputum and vomit are thought to be minimal risk unless contaminated with blood. Transmission may be by sexual contact or by drug users sharing needles.

Some people infected with HIV show no symptoms, others experience a short illness when first infected. This may be high temperature, sore throat and swollen lymph glands. HIV attacks the immune system and infected people can suffer a variety of ailments including dermatitis (particularly of the face), diarrhoea, oral candidiasis (thrush). HIV also makes people more susceptible to herpes simplex (cold sores), shingles, tuberculosis and salmonella. Full blown AIDS can give rise to cancers, autoimmune diseases and infection by a variety of agents.

Preventative measures involve careful control of sharps, good hygiene measures including control and prompt clean-up of blood spillages and personal hygiene. Avoidance of contact with sharps (e.g. by containment and avoidance of manual handling) is the best option but personal protective equipment has a role to play e.g. in refuse handling. Immunisation is not available.

Reporting of AIDS began in 1982 and in the period up to 30th September 1994 there were 9,865 cases reported in UK. Occupationally health workers are the group most at risk. It is now recognised that HIV is not as infective as some people believe. The risk of infection from a single percutaneous exposure has been reported as being about 1 in 300. Groups other than health workers are thought to be at low risk of occupational infection.

Leptospirosis

This is a bacterial infection passed from rats to humans via rat urine. The infective agent is *Leptospira icterohaemorrhagiae*. The disease is commonly known as Weil's disease. The bacteria may enter the body through cuts or abrasions or through the mucus membranes e.g. the lining of the nose, the mouth and conjunctiva. The disease is associated with wet areas and watercourses but not salt water.

This is a serious disease and is fatal in approximately 20 % of cases. Early symptoms are similar to flu with a high temperature, chills, intense throbbing headache, vomiting and muscle pains. The kidneys may be affected. Jaundice may occur as the disease progresses and in some cases meningitis develops.

Prevention involves careful attention to personal hygiene, covering cuts and abrasions with waterproof dressings, taking extra care to clean and dress any cuts, use of personal protective equipment (e.g. waterproof gloves, boots and suits), avoiding total immersion in potentially contaminated water and in some cases by control of rats. Immunisation is not available.

Approximately 50 cases a year of this disease are reported. Water sports enthusiasts such as canoeists are at risk so many of the reported infections may be due to non-occupational infections. Data is available from the Health and Safety Executive on occupational infections. In the ten year period from year 90/91 to 99/00 there were 79 work related infections reported under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations. This gives an average of 7.9 each year, clearly a low risk.

Lyme disease

This is a bacterial infection passed to humans via deer ticks. The infective agent is *Borrelia burgdorferi*. Transmission occurs when an infected tick bites a human.

The first symptoms include development of a red dot at the site of the tick bite. This expands and may reach 5 cm across. Flu like symptoms develop, fever, headache, lethargy and muscle pain. A characteristic of Lyme disease is a painful joint inflammation with redness and swelling typically affecting the knees. Complications such as myocarditis (inflammation of the heart muscle) and meningitis may occur.

Prevention is by control of exposure to ticks. The deer ticks may be found in woodland in the ground vegetation. Covering the lower legs and closure of trouser bottoms may prevent ticks attaching.

Data from the Health and Safety Executive on occupational infections is available, but this is limited as Lyme disease has only been reportable under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations since 1995. For the years from 96/97 to 99/00 there were 16 work related infections reported giving an average of 4 per year, clearly a low risk.

Microsporium canis (ringworm)

This is a fungal infection transmitted by direct skin to skin contact with dogs. Spores can also be transmitted via dog faeces and the spores may remain viable for long periods (several months outdoors and up to five years indoors).

It starts as a small inflamed and swollen area which rapidly becomes a round white crusty lesion. The affected areas of the body are those where direct contact has occurred e.g. hands, forearms, etc.

Preventive measures include avoidance of contact with infected animals, keeping cuts and abrasions covered, prompt washing and covering of cuts, good personal hygiene including washing of areas of skin where direct contact has been made. Personal protective equipment certainly has a role to play and waterproof gloves, boots and a coverall or apron may be useful depending on circumstances. Immunisation is not available.

Incidence data was not available at the time of writing.

Rabies

Rabies is a viral infection. It may be found in dogs, foxes, cats and certain other animals. The virus is present in the saliva of an infected animal and may be transmitted if a bite breaks the skin.

This is a very serious disease and once symptoms have appeared it is usually fatal. Symptoms may occur between nine days and many months following a bite from an infected animal. Early symptoms are a sense of apprehension, headaches, fever, loss of appetite and malaise. The victim may be intensely thirsty but drinking may produce violent and painful spasms in the throat. Eye and facial muscles may become paralysed. Coma and death due to respiratory paralysis follow between 3 and 20 days after onset of symptoms.

In this country prevention of human infection has been by eradication of the disease and quarantine of imported dogs. Use of remote handling equipment (e.g. noose on a pole) by dogs wardens reduces the risk of infection as does suitable personal protective equipment. Prophylactic vaccination should be offered to anyone likely to be occupationally exposed. This might include certain workers at quarantine kennels. At present the UK is free of rabies and prophylactic vaccination would not normally be required for workers such as dog wardens.

There have been no occupationally related cases of rabies in the UK in the last 60 years.

Tetanus

A bacterial infection caused by *Clostridium tetani*. The spores of the bacteria are found in soil and manure and may be transmitted to human via a cut or abrasion. Spores entering an area of the body poorly supplied with oxygen may result in the organism multiplying and producing a toxin. It is the toxin that acts on the nerves controlling muscle activity.

The best known symptom of this disease is stiffness of the jaw (hence the common name lockjaw). Other symptoms include stiffness of the abdomen and back muscles and contraction of the facial muscles. The pulse may be raised with a slight fever and profuse sweating. Eventually painful muscle spasms develop which may result in asphyxia if the larynx or the chest wall is involved.

Prevention is by taking care to cover any open wound before undertaking work involving contact with soil. Cuts and abrasions should be carefully cleaned and covered. Immunisation is available and booster vaccinations are recommended every ten years.

Incidence of cases of tetanus is approximately 20 cases per year in the UK. Data from the Health and Safety Executive on occupational infections is available, but this is limited as tetanus has only been reportable under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations since 1995. For the years 96/97 to 99/00 there were 4 work related infections reported giving an average of just 1 per year so clearly the risk is low.

Toxocara canis

This is an infection with the larvae of a worm that lives in the intestines of dogs. Transmission is by hand-to-mouth contact with faeces of an infected dog.

Symptoms are usually mild and include fever and malaise. Following heavy infestation pneumonia and seizures may occur. One much publicised complication of infection is blindness. This only occurs if a larva migrates to the eye and dies there. This is rare.

Prevention of infection is by application of good hygiene practices to prevent hand-to-mouth infection and by use of personal protective equipment (e.g. gloves). Immunisation is not an option.

No data on incidence was available at the time of writing but occupational infection is likely to be low.

Toxoplasmosis

Toxoplasma gondii is a protozoan (single celled organism) that infects birds and mammals. It is transmitted to humans by hand-to-mouth contact, particularly with faeces of an infected cat. Infection in humans is not uncommon and may well occur in a non-occupational setting, e.g. through contact with pet cats. *Toxoplasma gondii* infection is also associated with the eating of undercooked pork.

Many infected people show no symptoms. Where symptoms are present they can vary from acute fever with enlarged lymph glands to (rarely) infection in the brain, muscle and eye, leading to death. The main risk is infection of an expectant mother where the infection can pass across the placenta to the unborn baby. Infection in early pregnancy can result in miscarriage, still birth or birth defects including hydrocephalus, blindness, and mental retardation.

Prevention of infection is by application of good hygiene practices to prevent hand-to-mouth infection and by use of personal protective equipment (e.g. gloves). Immunisation is not available although some people do have natural immunity.

Data on the incidence of work related infection were not available at the time of writing although it is believed that in the UK the incidence in the general population is 2 in 1000. Most of these would show no symptoms.

Tuberculosis

This is a bacterial disease caused by the organism *Mycobacterium tuberculosis*. It is transmitted in airborne droplets produced when an infected person coughs or sneezes.

Many people infected with tuberculosis show no symptoms and the infection is contained by the immune system. Between 5 and 10% of infected people do, however, develop symptoms. Coughing (sometimes with blood), chest pain, shortness of breath, fever and sweating, poor appetite and weight loss are all symptoms. Complications such as pleural effusion (fluid between the lung and chest wall) and pneumothorax (air between the lung and chest wall) may occur. Progression of the disease can result in fatality.

Prevention is primarily by immunisation with BCG vaccine. It is advisable for anyone in an occupation which brings them into contact with numbers of people to ensure that they have had this vaccination. Because of the route of transmission (airborne droplets) it is very difficult to prevent exposure other than in a health care environment where one is working with people known to be infected.

Tuberculosis is a major killer world-wide and there has been a resurgence in UK. Data is available from the Health and Safety Executive on occupational infections and this does help to put the risk into perspective. In the ten year period from year 90/91 to 99/00 there were 126 work related infections reported under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations. This gives an average of 12.6 reported infections each year. On the basis of this data one could say that the risk of infection at work is not great.