Infectious diseases in the workplace

This factsheet deals with the main infectious diseases in the workplace, their symptoms, their prevention and the main groups of workers at risk. It also covers the legal obligations of employers and the action that can be taken by workers and their representatives.

Government sources reported 1,100 cases of work-related infections in 2003. They accept this is probably a gross under representation of the real situation. The main activities involved were health care, social work, farming and food handling.

Main infectious diseases at work

Hepatitis
This is a viral liver disease with three main forms, A, B and C. Those at risk include healthcare workers, sewage workers, police and emergency services, morticians and embalmers and others who come into contact with bodily fluids.

Hepatitis A is easily contracted from close contact with infected individuals or ingesting contaminated food or faeces. Symptoms can range from virtually no effect through fever, nausea, lack of appetite, diarrhoea, abdominal pain and jaundice to coma and death. Prevention is achieved by good sanitation, waste disposal and personal hygiene.

Hepatitis B is 100 times more infectious than HIV, and carried in blood, saliva, semen and vaginal secretions. One third of those infected are without symptoms, and there are up to 50,000 symptomless carriers in the UK; one third suffer a mild flu-like illness and one third suffer severe illness for up to six months with nausea, vomiting, fever, pain, fatigue and jaundice. Cirrhosis or cancer of the liver can develop. Prevention can be achieved by vaccination, good personal hygiene and avoiding contact with bodily fluids.

Hepatitis C can cause chronic illness and ultimately death. It is also transmitted in body fluids though to a lesser extent than hepatitis B. There is no vaccine currently available.

HIV/AIDS
Acquired Immune Deficiency Syndrome (AIDS) is caused by the human immunodeficiency virus (HIV). The virus may be carried for many years before symptoms appear. A breakdown of the body’s defences can lead to serious infections and some cancers. Treatment with drugs can arrest the onset of symptoms. The virus is transmitted by infected blood, semen and vaginal fluid. Occupational groups at risk are health and personal care workers through needlestick injuries or contact with infected blood through skin cuts and abrasions. Prevention of exposure is achieved by good standards of cleanliness and hygiene.

Tuberculosis
Tuberculosis is a bacterial disease which mostly affects the lungs (pulmonary TB) but can affect other organs. The illness is severe and may lead to long convalescence or to permanent disability. Pulmonary tuberculosis can be transmitted by inhaling the saliva or sputum of an infected person or animal. Groups at risk are health care staff, workers in old peoples’ homes, homeless hostels and drug rehabilitation centres and farm and veterinary workers. Prevention is by BCG vaccination which offers immunity for up to 15 years.

Legionnaires’ disease
This is a bacterial respiratory disease which can be fatal. It is contracted by inhaling droplets of water contaminated with legionella bacteria emanating from cooling towers, air conditioning, humidifiers, showers and other water systems. Anyone in the vicinity of such systems is at risk. Control is by good design, location, maintenance and cleaning of water towers and other systems. The bacteria can be killed by biocides or raising the water temperature to over 60°C. Humidifier fever is a related disease though less virulent and caused by a variety of organisms.

Zoonoses
These are infections transmitted from animals to humans. The most severe are anthrax, bovine tuberculosis, brucellosis, hantavirus, psittacosis, Q fever, rabies, salmonellosis. A somewhat less serious group includes leptospirosis, cowpox, cryptosporidiosis, listeriosis, Newcastle disease, orf, ovine chlamydiosis, ringworm, tetanus and toxocariasis.

Infections in pregnant women
Some infections can cause miscarriages or affect a breastfeeding child: German measles, chickenpox, hepatitis, HIV, typhoid, tuberculosis, ovine chlamydia, and toxoplasma, found in infected cat and dog faeces.
Diseases of childhood
People without immunity who work in close contact with children, i.e. in education, health care, nursery care, child minding etc., are at a higher risk of infection from diseases of childhood such as measles, mumps, chickenpox, impetigo etc.

Legal requirements
The Control of Substances Hazardous to Health (COSHH) Regulations apply to biological agents and Schedule 3 of the COSHH Regulations covers Biological Agents. Schedule 3 contains the more specific requirements relating to biological agents (e.g. working with biological agents in laboratories, animal rooms and industrial processes, and notification requirements relating to biological agents). Biological agents are classified into Groups 1-4 with Group 1 being the least and Group 4 the most dangerous. A suitable and sufficient risk assessment must be carried out for any work activity involving the deliberate use of biological agents (e.g. research, medical care) or any exposure where exposure is incidental to the activity (e.g. farm work, sewage work, social work). The assessment should cover the agents, their form, effects and hazard groups, the likelihood of exposure and disease, the possibility of substitution by a less hazardous agent, the control measures, monitoring and health surveillance. The HSE must be notified of the use, storage or consignment of certain types of biological agents. Protective clothing and equipment should not itself become a means of transmitting agents. Monitoring of exposure should be carried out if a suitable technique is available. Health surveillance can involve testing for immunity after vaccination. Information should be provided to employees in writing, particularly when dealing with highly infective agents.

Vaccination policy
Vaccination is recommended as a control measure. Where a suitable vaccination procedure exists, employers should not expose non-immunised workers to an infectious agent.

Pregnant women
A particular risk assessment needs to be carried out of the hazards to pregnant or breastfeeding women or women who have given birth within the previous six months. Suitable protective or preventive measures should be provided, working conditions altered or suitable alternative work provided. If none of these can be achieved, the woman should be suspended on full pay for as long as it is necessary to avoid the risk.

Reporting (RIDDOR)
Employers are required to report to the HSE any case of an employee suffering a notifiable occupational disease. Report should be made on Form F2508A, available from HSE Books. Self-employed people should also make a report. The infectious diseases which should be reported are listed in Schedule 3 of RIDDOR but there is a catch-all clause requiring a report in virtually all circumstances.

Action for safety representatives
▲ Ensure that members are fully informed and trained about the risks of their job and appropriate prevention and control measures including vaccination.
▲ Ensure the employer has a disease reporting system in place, ensure employees are instructed in when and how to use it and ensure incidents are acted on by the employer and reported to the safety committee.
▲ Ensure the employer carries out a comprehensive risk assessment which covers prevention, control, protection, emergency procedures and monitoring and health surveillance.
▲ Where biological agents are being used, stored or transported, ensure that the correct procedures are in force, according to the Hazard Group of the agent.
▲ Where there is a serious and imminent risk of infection, advise members that they are entitled to withdraw their labour in order to protect themselves until a safe system of work is applied. If circumstances allow, seek advice from your union officials before taking this step.
▲ If any disease symptoms occur, ensure that members report these immediately and that a report goes to the HSE if required. Any other people who might be affected should be immediately tested for signs of illness.

Resources