

About infections at work

Infections at work are those created by exposure to harmful micro-organisms such as bacteria, fungi, viruses, internal parasites, and other infectious proteins known as prions. These are called 'biological agents' in health and safety legislation. You may be harmed by micro-organisms by being infected with the micro-organism, by being exposed to toxins produced by the micro-organism, or by having an allergic reaction to the micro-organism or substances it produces.

Micro-organisms are found virtually everywhere in the natural environment. Most of these are harmless to humans and do many important jobs. They are used to make medicine. They can break down the oil from oil spills. They make about half of the oxygen we breathe. However, certain micro-organisms can cause harm - either by infection, allergy or being toxic.

You may come into contact with micro-organisms at work because you intentionally work with them, e.g. in a [microbiology laboratory](#)^[1]. But you are more likely to be exposed as a result of the kind of work you do, e.g. [as a farmer](#)^[2], or [a healthcare worker](#)^[3] i.e. the exposure is incidental to the purpose of the work.

There were over 2000 new cases of occupationally acquired infection reported in 2002, an increase on the previous year's figure. The most common type of infection was diarrhoeal disease and [most cases of infection were reported in healthcare workers](#)^[4].

In most work premises where there is either intentional work with micro-organisms (e.g. microbiology laboratories and research facilities) or a relatively high likelihood of occupational exposure (e.g. hospitals and nursing homes) the HSE is the regulatory body. However, in some cases where the possibility of exposure is incidental to the purpose of the work (see above) the regulatory body may be the local authority. Examples of such workplaces, where the regulation of safety is the responsibility of the local authority, are skin piercing and tattoo parlours (where there may be a risk of transmission of blood-borne viruses) and large office blocks (where cooling towers could be source of Legionnaires' disease). Guidance on these issues is therefore available elsewhere on the website in the [Local Authority Unit site](#)^[5].

More about two of the key risk occupations:

- [Healthcare](#)^[6]

- [Laboratories](#)^[7]

About this website

This site covers ill health caused by exposure to micro-organisms such as bacteria and viruses (commonly known as pathogens, bugs and germs) during work activities. This is a broad topic that ranges from accidental infections with gut bacteria in the sewage industry, that result in mild diarrhoea, to laboratory accidents involving more serious pathogens such as HIV.

This site is primarily designed to provide information to employers, workers and health and safety professionals. There is also some information that will also be of interest to others with a more general interest in biological agents.

Link URLs in this page

1. microbiology laboratory
<http://www.hse.gov.uk/biosafety/laboratories.htm>
2. as a farmer
<http://www.hse.gov.uk/biosafety/diseases/zoonoses.htm>
3. a healthcare worker
<http://www.hse.gov.uk/biosafety/healthcare.htm>
4. most cases of infection were reported in healthcare workers
<http://www.hse.gov.uk/statistics/industry/healthservices/index.htm>
5. Local Authority Unit site
<http://www.hse.gov.uk/lau/lacs/index.htm>
6. Healthcare
<http://www.hse.gov.uk/biosafety/healthcare.htm>
7. Laboratories
<http://www.hse.gov.uk/biosafety/laboratories.htm>