



**University Health and Safety Policy
Policy on pathogens
(excluding Blood - borne viruses)**

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1. POLICY

It is the policy of Loughborough University to prevent or control the risk of exposure to pathogens which may be related to work or study.

This policy is concerned with the risks of pathogens which are not blood borne. It should be read in conjunction with the policy on blood borne viruses.

The main legislation which is relevant to this subject is the Control of Substances Hazardous to Health (2002) Regulations which includes a specific requirement to manage biological hazards. Further information is available in the [Control of Substances Hazardous to Health Policy](#)

Examples of the pathogens covered under this policy are tetanus, which is carried in the soil; hepatitis A, polio and other bacteria and viruses which are spread by faeco-oral contact; and leptospirosis which is a zoonosis (spread by animals).

This policy does not cover exposure to pathogens which arises as a result of overseas travel.

2. PROCEDURES / GUIDANCE

2.1 Scope

This policy covers anyone across campus who is at risk of exposure to pathogens in the course of their work. This includes, but may not be limited to:-

- a) Staff carrying out research e.g. School of Sport, Exercise and Health Sciences and civil engineering (staff involved in laboratory based activities to intentionally cultivate or manipulate pathogens should also refer to the University's policy on Hazardous Biological Agents)
- b) Students (under supervision of staff)
- c) University employed staff working in the medical centre
- d) Facilities Management staff who maintain grounds and gardens
- e) Facilities Management and imago staff who may be exposed to human waste in the course of their duties
- f) Facilities Management staff who may enter drains in the course of their duties

All departments and sections which have identified a potential for exposure to pathogens must carry out a local risk assessment, taking into account the general guidance given in this policy.

2.2 General principles

The risk of exposure to pathogens can be significantly reduced by following the guidance in this policy, and by:-

- a) Good hand washing practices
- b) Protective clothing, appropriate for the level of risk
- c) Covering broken skin with plasters

No food or drink shall be consumed in any area where there may be a risk of exposure to pathogens. Meal breaks should ideally be taken in a dedicated area, although a clean office area complies with the law if there is no suitable alternative.

2.3 Training

All those who may be exposed to pathogens in the course of their work must be given training on:-

- a) the nature and level of risk;
- b) local policies in place to manage the risk;
- c) responsibilities of the individual to reduce the risk; and
- d) where to seek further advice or information.

Training can be provided by the Occupational Health Department on request.

Departments should also incorporate training for new employees (and students where appropriate) into local induction procedures.

2.4 Cleaning and Disinfection

Decisions will be made locally regarding disinfection processes appropriate for the level of risk. Further guidance is available from the Health, Safety and Environment Office or Occupational Health.

Departments will need to carry out COSHH assessments locally to ensure that any additional risks arising from the use of disinfectants are managed.

2.5 Gloves and skin protection

Disposable gloves must be worn when handling potentially contaminated materials. Gloves must be of a type suitable for the activity, further guidance on this is available from <http://www.hse.gov.uk/latex/labs.htm>

Powdered latex (rubber) gloves must NOT be used because of the high risk of causing allergic reactions.

If latex gloves are used they must be powder free and have a low level of extractable proteins (e.g. less than 50 mcg/g). Users must be made aware of the potential for developing allergy and measures should be in place for identifying others (e.g. clients, research subjects) who have a pre-existing allergy.

Nitrile gloves are often a good alternative to latex .

Glove wearing does not replace the need for handwashing – hands must be washed before and after wearing gloves. See Appendix A for guidance on good handwashing technique.

Alcohol-based hand rubs (minimum alcohol content 60%) may be used as an alternative to hand washing when hands are not visibly contaminated e.g after removing gloves if hand washing facilities are not available.

2.6 Waste Disposal

Departments should have proper arrangements in place to dispose of contaminated waste, Where required, this may be arranged via the chemistry department by prior arrangement. It must be double bagged in yellow bags, and will be taken for temporary secure storage prior to incineration. Further information is available from the Health, Safety and Environment Office.

2.7 Immunisation

There may be occasions where immunisation of staff or postgraduate students is required in accordance with particular risks. Appendix B provides further information about some common workplace pathogens, and Appendix C provides information about immunisation protocols. Where risk assessment indicates that immunisation may be required, this should be discussed with Occupational Health who will advise further.

2.8 Research Passports and work with NHS patients

University staff and employees who are undertaking work with NHS patients will usually need to apply for a research passport. This includes an occupational health check and may involve additional vaccines against relatively common infectious diseases. Further details can be found in the [Research Passport procedure](#)

3. RESPONSIBILITIES OF DUTY HOLDERS

3.1 Heads of Department must make arrangements to ensure that;-

- a) suitable and sufficient risk assessments are in place ;
- b) staff in the department/section have received suitable training;
- c) records are kept regarding the immunisation status of staff and postgraduate students where a risk assessment shows that there are specific risks (i.e. beyond the immunisation requirements of the general population)

3.2 Managers/supervisors/leaders of research groups shall;-

- a) carry out suitable and sufficient risk assessments;
- b) ensure all staff/students have received appropriate training in relation to this policy ;
and
- c) monitor compliance with this policy.

3.3 Individuals shall

- a) work in accordance with this policy;
- b) report any difficulties complying with this policy;

3.4 Occupational Health shall

- a) provide guidance to managers on the implementation of this policy;
- b) provide/support training on request in accordance with this policy;
- c) advise on immunisation requirements in relation to particular hazards, and arrange immunisation where this can not be done through the GP

4. FURTHER READING

Immunisation against infectious diseases (the Green Book); HMSO, 1996
(available on-line from Department of Health)

http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/GreenBookGeneralInformation/GreenBookGeneralArticle/fs/en?CONTENT_ID=4097254&chk=isTfGX

Infection at Work – controlling the risks
Advisory Committee on Dangerous Pathogens
HMSO, 2003

(available on line from Department of Health)
http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4070102&chk=yQc0DS

Good Hand washing technique

Wash your hands:-

- Before you eat, drink, take medicine, smoke, put on make up etc
- After any work activity where you may have become contaminated
- After removing gloves
- ***Use soap and running water (preferably warm water - hot water increases the risk of skin irritation)***
- ***Wash all surfaces thoroughly including wrists, palms, back of hands and thumbs and under fingernails***
- ***Rub hands together for at least 10 – 15 seconds***
- ***Rinse and dry hands well (on paper, towels, or hand dryers – not on clothes!)***

Common workplace pathogens – information sheet

Pathogens are micro-organisms (bacteria, viruses, fungi) which create a hazard to human health; they usually harm by causing infection but may also produce toxic substances.

Tetanus

Tetanus is caused by a toxic substance produced by *clostridium bacillus* which lives in the soil. It is most likely to cause problems if it gets into the body in areas where there is little oxygen e.g. from puncture wounds or burns. Immunisation is very effective against this disease – only 5–10 cases occur in the UK annually due to high levels of immunisation.

Immunisation has been routine for children born in the UK after 1961 and usually consists of a course of 3 doses for babies and boosters at age 5 and 15. 5 doses provides lifelong immunity in most cases. Additional doses will be given at a hospital if a particularly high risk injury occurs.

Immunisation against Tetanus is recommended for all in accordance with Department of Health Policy. It is of particular relevance for those who may be in contact with soil and garden equipment such as grounds and garden staff.

Polio

Polio is a viral illness which affects the nervous system and can cause paralysis. It can be passed from person to person, or passed on through the faeces of an infected person.

The virus is highly infectious but has been practically eliminated in the UK due to high immunisation levels. In recent years, the small number of cases which have occurred in the UK have been largely related to overseas travel.

Initial immunisation consist of 3 doses of vaccine given over a three month period, this has been available for all children born in the UK since 1956.

Immunisation against polio is recommended for all in accordance with Department of Health policy. It is of particular relevance to those who may come into contact with human waste such as cleaners, estates staff etc.

Hepatitis A

Hepatitis A is a viral illness which affects the liver. It spreads by person to person contact, and can also be caught from contact with faeces of an infected person. Contaminated food or water can also be involved.

Around 2000 cases occur in the UK each year which may range from a very mild illness (especially in children) to a severe flu type illness which can last several weeks.

Immunisation is effective, and is recommended for those at high risk e.g. working in laboratories with hepatitis A cultures, working in some care homes, or travelling to higher risk countries

Immunisation against hepatitis A should be considered for those who may be frequently exposed to raw sewage e.g. as part of a research programme. Those who clean toilets or clean up spillages of human waste do not require vaccination as adequate protection can be provided by the use of protective clothing and good hygiene practices.

Immunisation consists of an initial dose, followed by a booster dose 6 – 12 months later. A further booster will be required 20 years later if still at risk.

Leptospirosis

Weils disease is a form of leptospirosis (*Leptospira icterohaemorrhagiae*) which is carried by rats. It can be passed on if broken skin or the surfaces of the mouth, throat or eyes come into contact with water which has been contaminated with urine from infected rats. Those most at risk include farmers, sewer workers and those who fish on river banks, The disease is not spread from person to person.

Symptoms are a severe flu type illness with persistent headache. If diagnosed early it can be treated with antibiotics which are usually very effective.

There is no immunisation against Leptospirosis. Protection is by good practice such as frequent handwashing, especially before eating and drinking. In addition, early diagnosis is essential to allow proper treatment. An information card with relevant guidance is available from Occupational Health for all those who are at risk (mainly those who enter drains, and possibly some grounds staff, plus research or technical staff who gather samples from waterways and sewers)

Rubella (German measles)

Rubella is a mild viral illness. If contracted by a pregnant woman it can cause birth defects in the baby.

Immunity is required for all those working with patients, either in a health care role or as a researcher working with NHS patients and therefore requiring a research passport.

The usual requirement is for either evidence of 2 doses of MMR (Mumps Measles Rubella) vaccine or a blood test showing antibodies to rubella. This vaccination has been standard for children since 1988 in the UK, prior to that teenage girls were vaccinated against rubella only

Measles

Measles is an acute viral illness which can lead to severe complications, particularly in those who have low immunity.

Immunity is required for all those working with patients, either in a health care role or as a researcher working with NHS patients and therefore requiring a research passport.

The usual requirement is for either evidence of 2 doses of MMR (Mumps Measles Rubella) vaccine or a blood test showing antibodies to measles. The measles vaccination has been standard for children since 1968 in the UK as a single vaccine, and as MMR since 1988. The two dose programme was introduced in 1996

Tuberculosis

Tuberculosis is a bacterial disease which most commonly, but not exclusively, affects the lungs causing symptoms such as weight loss, night sweats and a persistent cough. It is NOT particularly easy to catch – infection is most commonly associated with prolonged exposure to an infected individual e.g. a close family member.

Immunisation is with a single dose of BCG vaccine, which was routinely given to 10-14 year old children until 2005. Vaccination now is done according to risk.

Evidence of immunity will often be sought for those working with patients, either in a health care role or as a researcher working with NHS patients and therefore requiring a research passport. A BCG Scar (usually on the left upper arm) will be taken as evidence of immunity, as will written evidence that BCG immunisation has been given. In the absence of these, a blood test or skin test can be arranged to test immunity.

Immunisation to TB does not give complete immunity. Symptoms such as a persistent cough, night sweats or unexplained weight loss, particularly if someone has been exposed to a known TB case should trigger a discussion with OH or a GP for advice.

Varicella (chicken pox)

Chicken pox is an acute, highly infectious viral illness; it tends to be mild in children but causes more severe illness in adults, particularly those with low immunity. There is no routine immunisation programme in the UK.

Immunity is required for all those working with patients, either in a health care role or as a researcher working with NHS patients and therefore requiring a research passport.

A definite history of chicken pox infection will be taken as evidence of immunity. Failing this a blood test can be carried out; in the absence of immunity, immunisation will be required.

Appendix C - Occupational immunisation requirements

Disease	Dose schedule	Who is this recommended for?	How can I get it
Tetanus	5 doses over a lifetime. Usual pattern is 3 doses in infancy, and boosters at ages 5 and 15; or an initial course of 3 doses and boosters 10 and 20 years later	Everyone Especially important for those in contact with soil and garden equipment	Through your GP
Polio	3 doses over 3 months usually in infancy	Everyone Especially relevant for those who may come into contact with human waste e.g. cleaners, plumbers	Through your GP
Polio	Additional booster every 10 years	Staff, 'regularly handling faecal specimens' e.g. in laboratories ¹	Discuss with occupational health in the first instance
Hepatitis A	Initial dose, lasts for 12 months Booster dose 6 – 12 months after first dose Further booster after 20 years	Those with, 'risk of repeated exposure to raw sewage' ² , identified following risk assessment	Discuss with occupational health in the first instance
Tuberculosis	One dose of BCG vaccine where required	Depending on the degree of risk, this may be required for those who require a research passport for work with NHS patients, or for those who work in healthcare	Discuss with occupational health in the first instance
Rubella (German)	2 doses of vaccine given as MMR	This is essential for those who	Discuss with occupational health in the first

¹ Immunisation against infectious disease - 'The Green Book', chapter 12, [Immunisation of healthcare and laboratory staff](#)

² Immunisation against infectious disease - 'The Green Book' chapter 17, [Hepatitis A](#)

measles)	(unless a blood test shows evidence of immunity)	require a research passport for work with NHS patients, and for those who work in healthcare	instance
Measles	2 doses of vaccine given as MMR (unless a blood test shows evidence of immunity)	This is essential for those who require a research passport for work with NHS patients and for those who work in healthcare	Discuss with occupational health in the first instance
Varicella (chicken pox)	2 doses of vaccine for those who have not previously had the illness	This is essential for those who have not previously had the illness and who require a research passport for work with NHS patients or work in healthcare	Discuss with occupational health in the first instance
Typhoid	Immunisation is not currently recommended for any university staff in relation to occupational exposure. Immunisation may be appropriate for some staff travelling overseas on university business.		
Leptospirosis	Immunisation does not exist. Protection is through good working practices, and early diagnosis if infection occurs.		
Influenza	1 dose annually where indicated	This may be considered for those who have direct NHS patient contact through work requiring a research passport and for those who work in healthcare	Discuss with occupational health in the first instance (those who require the vaccine for non-work related reasons e.g. because they have particular health risks, should see their GP)
Hepatitis B	3 doses over either 3 or 6 months, depending on the level of risk; a fourth dose is required with the 3 month course. In all cases, a booster is recommended after 5 years.	Those who are exposed to blood and blood-contaminated body fluids should consult the University blood borne viruses policy.	Discuss with occupational health in the first instance