SAFETY and BIOSECURITY Code of Practice

Leahurst Campus and IVS including:
Hospitals & Large Animal Practice; Ness Heath & Wood Park Farms, Diagnostic Laboratories & IGH, IIB & IACD Research Facilities

Liverpool Campus including:
University Veterinary Practice; Veterinary Teaching Suite; IVS Thompson Yates Offices

www.liv.ac.uk/vets/safety

Revised January 2019
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SAFETY AND EMERGENCY INFORMATION

PHONE

FIRE, POLICE, AMBULANCE EMERGENCY SERVICES 2222
Non-University phone 0151 794 2222

LEAHURST SECURITY MOBILE 073420 67763
LEAHURST SECURITY LANDLINE 46004

UNIVERSITY SECURITY CONTROL (Non-Emergency) 43253

Academic Safety Lead Prof Paul Wigley 56049
Head of Institute of Veterinary Science (IVS) Prof Susan Dawson 46015
Institute Manager, IVS Dr David Pattwell 56070
Institute Technical Manager and Deborah Wilson 56059
Deputy Health and Safety Coordinator
Institute Health and Safety Coordinator Michelle Mainwaring 49543
Institute Biological Safety Officer Mr Andrew Wattret 46070/46118

Vet Safety email vetsafe1@liverpool.ac.uk
Institute of Veterinary Science website www.liv.ac.uk/vets/safety

UNIVERSITY SAFETY CONTACTS https://www.liv.ac.uk/intranet/safety/

SAFETY ADVISOR Stephen Dunkley 43244
Assistant SAFETY ADVISOR Andrew Pollitt 43242
BIOLOGICAL SAFETY ADVISOR Lesley Andrews 43042
RADIATION PROTECTION ADVISOR Peter Cole 43467
Assistant RADIATION PROTECTION ADVISOR Louise Nicholson 43467

First aid boxes are located in all areas and contain a list of nearest trained first aid staff

ACCIDENTS
All accidents including near misses must be reported to your supervisor/line manager and the Leahurst Safety Office as soon as possible. An accident form must also be completed on the University H&S website; https://www.liv.ac.uk/intranet/safety/reportanaccident/
Guidelines, SoPs and other documentation on safety and biosecurity on the Leahurst Campus are available through the Veterinary Institute intranet site.
First Aid
Basic First-Aid material can be found in a number of First-Aid boxes throughout the campus. Please inform first aid staff (See Page 7) or Safety Supervisor if you find any items missing from any boxes. During working hours medical advice for minor injuries and illness can be obtained from the Occupational Health Service, phone 43236. Outside working hours and for more serious injuries and illness, medical attention is available for Leahurst staff at the Accident and Emergency Departments at Arrowe Park Hospital, the Countess of Chester Hospital; Liverpool staff should contact the Royal Liverpool Hospital. Contact security ext. 2222 if you require an ambulance.

Defibrillators
Leahurst has 2 defibrillators on site. The Main building and in the SATH. A list of those trained in defibrillator use is contained in this COP. Refresher training to be provided every 5 years. The AED in main reception is checked to ensure it is in working order and sufficient battery life by the IVS safety Coordinator. The AED in the SATH is checked by the Senior Nurse. The location of the AEDs have been notified to Safety Advisor Office.

Fire Safety
Fire escape routes, assembly points and procedures are prominently posted. Information on fire alarm systems is help locally in locked emergency boxes, with break-glass key holders, sited adjacent to Fire Alarm Panels in all buildings. Fire Risk Assessments have been completed for each building across the Institute and reviewed regularly. Fire Officers are listed on Page 8.

Fire Alarms
Fire alarms are tested weekly, usually early in the morning and this involves operating a break-glass switch and sounding the bells for a few seconds. Practice emergency evacuations take place at the beginning of term. Should the bells ring for longer than 30 seconds then you MUST assume that there is a fire and evacuate the building, and assemble in the designated area.

All students and members of staff must be thoroughly familiar with the position / operation of the fire alarm break glass points and the fire-fighting equipment within their department. Everyone should make themselves familiar with the various escape routes for the building, evacuation procedures and the position of the fire assembly points. Fire drills will be undertaken in all buildings throughout the year at the discretion of the Fire Officer.

Action to be taken on discovering a fire:
1. Sound the fire alert using the red break glass boxes. The alarms are linked through to Security control in Liverpool, who will call the Fire Service.
2. Dial 2222 and give clear details of the location of the fire i.e. campus, name the building, room space reference. Local security will respond to investigate the fire.
3. Use the nearest appropriate fire extinguisher to extinguish or contain the fire, but only if it is safe to do so without endangering yourself or others.
4. Wait at the Assembly Point inform the Fire Warden / Fire Brigade of the location of the fire.

Action to be taken on hearing the fire alarm:
1. Render safe any experiment or equipment in use if this does not cause delay. Departments and units are responsible for safety arrangements of their own animals.
2. Evacuate as quickly as possible, closing doors and windows if this does not cause delay. Use the nearest safe exit route and proceed to the assembly point which is specified on the Fire Action notice displayed in corridors.
3. On no account must you re-enter the building until you are given clearance by the Fire Officer or
Fire Warden.
4. Notify Fire Warden / Fire Service personnel of any local hazards or flammable materials such as gas cylinders, volatile liquids, hazardous chemicals etc.

*After hours and at weekends - Action to be taken:*
1. Sound the fire alarm
2. Go to the nearest telephone, dial 2222 and report the fire including the location. Security
3. Control will automatically call the Fire Service
4. Use the nearest appropriate fire extinguisher to extinguish or contain the fire without endangering yourself
5. If you cannot contain or extinguish the fire, make sure no one else is in the building, evacuate as quickly as possible by the nearest safe exit route closing all doors and windows and wait to direct the Fire Service to the point of the fire
6. Inform Security Control (2222)

**Fire Wardens**
Each area has a fire warden (Page 12) who will respond to an emergency and ensure all staff/students/visitors leave the building as quickly as possible. The academic member of staff teaching will be responsible for evacuating their student group.

**Instructions to Fire Wardens:**
1. Check that your area has been evacuated.
2. If unable to gain access to a room or area, you should not waste any more time but inform the Fire Officer on his arrival.
3. Note any particular hazard in the location of the fire e.g. cylinders of compressed gases, solvents, infective or radioactive substances and report this to the Fire Officer.
4. Do not endanger yourself carrying out your duties, telling the Fire Officer that you have been unable to carry out a full check of your area.

**Fire extinguishers**
Fire extinguishers are located in each building, along the corridors and near stairwells. The priorities are sounding the evacuation alarm and calling the fire service but using fire extinguishers where it is safe to do so and you are trained and confident in their use can often put a fire out before it has a chance to do serious damage. **Never throw water on an electrical or solvent fire - use the powder or CO₂ Extinguishers**

**Water extinguishers** are suitable for burning paper, wood or fabrics only. They must **NOT** be used on electrical fires, where live electrical wiring is suspected, burning solvents or most chemical fires.

**Carbon dioxide (CO₂) extinguishers** are suitable for most relatively small fires including electrical fires and burning oil or solvents. They work by excluding oxygen from the fire and it is necessary to watch in case the fire relights after the gas cloud dissipates. The gas clouds are very cold, so beware of burns to the skin. Wear gloves if possible.

**Dry powder** and **Foam** extinguishers are particularly suitable for solvent fires.

**Fire Blankets**
Again, sounding the alarm is the first priority, but fire blankets are often an effective way to put out small fires on surfaces or to smother the flames on a person who is on fire. Fire Blankets act by excluding oxygen, so beware of relighting once the blanket is removed. The blanket should be held up in front of you so that it protects you from the source of fire as it is put in place.
Means of Escape for Disabled People
Once the Head of Institute or Safety Coordinator is aware that a disabled person is located in one of the site buildings they will arrange for the preparation of a PEEP (Personal Emergency Egress Plan). Evac chairs are located in the Thompson Yate and VTS buildings on the main Liverpool campus but none are located on the Leahurst campus as most buildings are single storey and no PEEPs are in operation for any staff. Documentation on safety for disabled persons can be found here.

Emergency Plan
The majority of incidents can be managed efficiently and professionally by the University security team, but there may be occasions where the significance of the incident is such that a more robust structure involving intervention and control by senior University officers is required. In order to support the management process on such occasions, an Incident Management & Business Continuity Plan has been developed and is available here. Information can also be found on your computers desktop via the Emergency Information Icon.

The Institute of Veterinary Science has a local emergency response plan. A copy is available in your local area and on the intranet. A key element of the emergency preparedness plan is the evacuation of all staff, students, visitors and contractors and any others who may be affected, to a place of safety should an emergency arise.

Security
The Leahurst Campus has 24-hour Security presence from two FRCS Security Patrollers. Patrollers worked on 12 hour day and night shifts. The Security Control Room is located in Main Building beside the main reception desk. Security can be contacted on 46004, or mobile 073420 67763. Security on the main Liverpool Campus can be contacted on a non-emergency number of 0151 794 3252. 2222 is the emergency Security number for Security on Campus. Patrollers regularly patrol the Leahurst Campus and can assist in any emergency situation. In the event of an event where emergency services are required, Security must be contacted in order for them to liaise with the arriving services.

Staff should be aware to prevent tailgating in an out of buildings (most of which are fitted with electronic swipe card locks). Do not hold doors open for people you do not recognise or who have no valid identification credentials Staff and students are asked to keep their University identification visible at all times and visitors to site must wear a visitor’s badge.

By-pass Telephones at Leahurst
In the event of a complete telephone system failure, there are 3 by-pass telephones at Leahurst located at:

<table>
<thead>
<tr>
<th>Location</th>
<th>Extn. No.</th>
<th>By-pass No.</th>
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<tbody>
<tr>
<td>PABX Room</td>
<td>46126</td>
<td>336-8360</td>
</tr>
<tr>
<td>Equine Hospital</td>
<td>46041</td>
<td>336-8497</td>
</tr>
<tr>
<td>Reception/Security Office</td>
<td>46003</td>
<td>336-8498</td>
</tr>
</tbody>
</table>

These operate under any circumstances and can be used for emergency calls only (Fire, Police and Ambulance) by pressing the recall button “R” and then 2222.
**Bomb Threats**

With our Direct Dial In telephone system it is possible that bomb threats or warnings could be received by any staff member. The University Security Service has established the following procedure for dealing with this eventuality.

1. Try to alert a colleague who will listen in on the call.
2. Gain as much information as possible from the caller on the position, timing and type of bomb, and the motives for planting it.
3. Listen for as many clues as you can about the identity and location of the caller; sex, age, accent, manner, background noises, etc.
4. Write all these down; do not trust your memory.
5. As soon as the caller hangs up, phone the Security emergency ext. 2222 and give them all the details. They will then take control of the situation.
6. Inform the nearest Safety supervisor immediately afterwards.

It is also possible that bomb or other threats might be received by email. In this case Security should be immediately informed on central security emergency number 2222. Security staff will then take control of the situation. Email threats should be kept for information and forwarded as requested.

**Accidents**

Accidents, including ‘near miss’ incidents, must be reported to your local safety coordinator or the Institute safety coordinator as soon as possible (see Page 7 for contact details). This includes accidents/incidents both on site and occurring during work/placements off site (e.g. on client’s farms, during field work etc.). Accidents should be reported as soon as possible online to the Safety Advisors Office via this link: https://www.liv.ac.uk/intranet/safety/reportanaccident/. When completed, the forms are signed by the Head of School and kept on file.

The Head or Manager of each Department or other Unit is responsible for ensuring, so far as reasonably practicable, that the arrangements are in place to ensure that all accidents, including incidents where injury or damage might have occurred, are investigated with the aim of preventing recurrence and reported to the Safety Adviser’s Office without delay. Further details on accident investigation and the procedures followed can be found in SC-11 and here.
Safety Policies

University Safety Policy
A Statement of Safety Policy Adopted by the Senate and Council of the University is contained in the document University Policy on Health and Safety at Work, available here.

Health and safety depends on co-operative efforts by all. The University expects staff and students to recognise that they have a clear duty to:
- take care for the health and safety of themselves and others
- co-operate fully with health and safety arrangements made by the University or University Departments

There is a Health and Safety Governance Committee, with direct responsibility to Council, and under its terms of reference it is required to keep under review arrangements for securing the safety of all members of the University.

The University has many documents and advice on safety at work, which can be found here. The web site includes specific areas for bio-safety and genetic modification.

Leahurst Campus and IVS Policy Statement of Intent
In the Faculty of Health and Life Sciences, the responsibility for safety and biosecurity falls to Departments/Schools and, particularly, Institutes. Level 2 Heads are, accordingly, responsible for the management of safety and biosecurity, but are advised and assisted by site based Committees such as the Leahurst Safety and Biosecurity Committee, its subcommittees and the Safety Coordinator. Each Site Safety Coordinator has a Deputy (or Deputies) to act in their absence and oversee particular areas of activity.

High standards of health and safety and of biosecurity are as important as high standards in teaching, research and other activities. Anything that cannot be carried out to an adequate safety standard, based on a risk assessment, should not be done.

Health, safety and biosecurity are an integral part of the duties of all members of staff, for which they are held accountable at all levels. The Institute will seek to encourage its members to participate in and contribute to the establishment and observance of safe working practices.

The Faculty is committed to the following objectives:-

- The provision of a healthy and safe working and teaching environment to those who might be affected by our activities and/or premises
- To ensure mechanisms are in place to prevent work related injury and ill health
- Compliance with health and safety legislation as a minimum
- Continuous improvement in health and safety performance
- To provide financial and physical resources necessary to ensure high standards of health and safety
- Progress against HASMAP levels of assurance
In securing the competence of its staff in their health and safety duties, staff will be provided with relevant training to enable them to carry out their role. Training records will be kept locally and reviewed annually. Details of training available through the Safety Advisors Office can be viewed here.

Every department, group leader and supervisor has specific responsibility for health, safety and biosecurity arrangements in their own area.

The Faculty expects all staff and students to recognise that equally there is a clear responsibility on them to exercise self-discipline and accept responsibility to do everything they can to prevent injury to themselves and others.

It is the duty of all individuals to:

- Use safe working procedures at all times.
- Use protective equipment as prescribed in risk assessments or safe systems of work.
- Report accidents and potentially dangerous incidents to the Head of Department, Departmental Safety Coordinator or Supervisor, and co-operate fully in investigations which are carried out to prevent recurrence.
- Report unsafe or unhealthy working conditions to their Supervisor or the Departmental Safety Coordinator.
- When working outside the University, to pay attention to local safety precautions and ensure that those who may be affected by hazards arising from their work are kept informed.

In addition visitors (including contractors and visiting members of the public) are required to comply with the Institutes policies, codes and procedures

Please remember health and safety is everyone’s responsibility.

Safety and biosecurity matters will be subject to annual review and be updated accordingly in order to achieve progressive improvement in safety performance.

The Institute believes a safe and healthy working and teaching environment is a fundamental right of all staff and students and also as an active veterinary facility for our veterinary clients.

Signed

Professor Paul Wigley
Chair of Leahurst Safety and Biosecurity Committee

Date  31 January 2019
# Safety Staff

## Senior Leaders

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<thead>
<tr>
<th>Name</th>
<th>Area</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Paul Wigley</td>
<td>Academic Lead, Health and Safety</td>
<td>56049</td>
</tr>
<tr>
<td>Susan Dawson</td>
<td>Head of Institute, Institute of Veterinary Science (IVS)</td>
<td>46054</td>
</tr>
<tr>
<td>David Pattwell</td>
<td>Head of Operations IVS</td>
<td>56070</td>
</tr>
<tr>
<td>Kieron Salmon</td>
<td>HoD, Dept of Veterinary Education, IVS</td>
<td>44236</td>
</tr>
<tr>
<td>Catherine Finnegan</td>
<td>University Veterinary Practice (UVP), IVS</td>
<td>41503</td>
</tr>
<tr>
<td>Helen Orton</td>
<td>Thompson Yates Building, Liverpool</td>
<td>45735</td>
</tr>
<tr>
<td>Cathy McGowan</td>
<td>HoD, Dept of Equine Clinical Science, IVS</td>
<td>46152</td>
</tr>
<tr>
<td>Laura Blackwood</td>
<td>HoD, Dept of Small Animal Clinical Science</td>
<td>56247</td>
</tr>
<tr>
<td>Rob Smith</td>
<td>HoD, Dept of Livestock Health &amp; Welfare</td>
<td>46087</td>
</tr>
<tr>
<td>Lorenzo Ressel</td>
<td>HoD, Dept of Veterinary Pathology and Public Health (VPPH), IVS</td>
<td>46189</td>
</tr>
<tr>
<td>Jane Hurst</td>
<td>Mammalian Behaviour &amp; Evolution, Institute of Integrative Biology (IIB)</td>
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## Safety Co-ordinators

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<th>Area</th>
<th>Role</th>
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<tbody>
<tr>
<td>Michelle Mainwaring</td>
<td>IoVS</td>
<td>Institute Safety Coordinator</td>
<td>49543</td>
</tr>
<tr>
<td>Deborah Wilson</td>
<td>IoVS</td>
<td>Deputy Institute Safety Coordinator</td>
<td>56059</td>
</tr>
<tr>
<td>Jan Brett</td>
<td>Research Labs</td>
<td>DSC Research Labs &amp; CL3 lab</td>
<td>56060 or 07807 106623</td>
</tr>
<tr>
<td>Andrew Wattret</td>
<td>Pathology</td>
<td>DSC Microbiology</td>
<td>46070 or 46118</td>
</tr>
<tr>
<td>Helen Smith</td>
<td>Pathology - PM Room</td>
<td>DSC Post-Mortem Rooms</td>
<td>07970 247254</td>
</tr>
<tr>
<td>Valerie Tilston</td>
<td>Pathology - Histology</td>
<td>DSC Histology</td>
<td>46168</td>
</tr>
<tr>
<td>Marion Pope</td>
<td>EM Unit</td>
<td>DSC EMU</td>
<td>56030</td>
</tr>
<tr>
<td>Rachel Rankin</td>
<td>SATH</td>
<td>DSC SATH</td>
<td>56151 or 07807 106600</td>
</tr>
<tr>
<td>Phil Wood</td>
<td>SATH</td>
<td>Deputy DSC SATH</td>
<td>56137 or 07807 106617</td>
</tr>
<tr>
<td>Louise Dale</td>
<td>SATH</td>
<td>Deputy DSC SATH</td>
<td>56101</td>
</tr>
<tr>
<td>Liz Sweeney</td>
<td>SATH</td>
<td>Deputy DSC SATH</td>
<td>56154</td>
</tr>
<tr>
<td>Alisa Dean</td>
<td>SATH</td>
<td>Deputy DSC SATH</td>
<td>56135</td>
</tr>
<tr>
<td>Rick Humphries</td>
<td>MBE</td>
<td>DSC MBE</td>
<td>46102</td>
</tr>
<tr>
<td>Amanda Davidson</td>
<td>MBE</td>
<td>Deputy DSC MBE</td>
<td>46104 or 46155</td>
</tr>
<tr>
<td>Helen Braid</td>
<td>Equine</td>
<td>DSC Equine Yards</td>
<td>46075</td>
</tr>
<tr>
<td>Jayne Tansey</td>
<td>Equine</td>
<td>Deputy DSC Equine Yards</td>
<td>46067</td>
</tr>
<tr>
<td>Jane Devaney</td>
<td>Equine</td>
<td>DSC Hospital &amp; Radiation Safety</td>
<td>56017</td>
</tr>
<tr>
<td>Name</td>
<td>Address</td>
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<tr>
<td>Gareth Quinn</td>
<td>UVP</td>
<td>DSC UVP</td>
<td>48790</td>
</tr>
<tr>
<td>Helen Barry</td>
<td>Ritchie House</td>
<td>SC Offices Ritchie House</td>
<td>56201</td>
</tr>
<tr>
<td>Fred Rylands</td>
<td>Leahurst House</td>
<td>SC Offices Ritchie House</td>
<td>56077</td>
</tr>
<tr>
<td>Lee Moore</td>
<td>VTS</td>
<td>DSC VTS</td>
<td>50257</td>
</tr>
<tr>
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<td>50257</td>
</tr>
<tr>
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<td>DSC NHF</td>
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<tr>
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<td>DSC WPF</td>
<td>078814 44318</td>
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<td>Andrew Parkinson</td>
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<tr>
<td>Alistair Fletcher</td>
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<td>DSC FAP</td>
<td>46052</td>
</tr>
<tr>
<td>Sylvia Yang</td>
<td>Zoonosis Building</td>
<td>DSC</td>
<td>46015</td>
</tr>
<tr>
<td>Karen Mahon</td>
<td>Thompson Yates Building</td>
<td>DSC Thompson Yates Building</td>
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**Fire Safety**

<table>
<thead>
<tr>
<th>Deputy Fire Officers</th>
<th>Fire Wardens</th>
<th>Building</th>
</tr>
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<tbody>
<tr>
<td>Dave Jones</td>
<td>John Blagbrough, Jenny Llewelyn, Karen Ryan, Andrew Wattrett, Ruth Harvey</td>
<td>Main Building</td>
</tr>
<tr>
<td>Jan Brett</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sylvia Yang</td>
<td>Michelle Mainwaring</td>
<td>Zoonosis Centre</td>
</tr>
<tr>
<td>Fred Rylands</td>
<td></td>
<td>Leahurst House</td>
</tr>
<tr>
<td>Helen Braid</td>
<td></td>
<td>1952 Building</td>
</tr>
<tr>
<td>Helen Braid</td>
<td></td>
<td>Sandstone Cottage</td>
</tr>
<tr>
<td>John Kane</td>
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<td>Wellcome Building</td>
</tr>
<tr>
<td>Sally Healy</td>
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<td>Ritchie House</td>
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<tr>
<td>Rachel Rankin</td>
<td>Philip Wood</td>
<td>SATH</td>
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<tr>
<td>Helen Braid</td>
<td>Jane Devaney</td>
<td>PLEH</td>
</tr>
<tr>
<td>Sue Jopson</td>
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<td>Equine ICU</td>
</tr>
<tr>
<td>Marion Pope</td>
<td>Janet Davies.</td>
<td>HELC/EMU</td>
</tr>
<tr>
<td>Rick Humphries</td>
<td>Amanda Davidson</td>
<td>MBE</td>
</tr>
<tr>
<td>Nigel Jones</td>
<td>Ray Ellis</td>
<td>Ness Heath</td>
</tr>
<tr>
<td>John Cameron</td>
<td>Andrew Parkinson</td>
<td>Wood Park</td>
</tr>
</tbody>
</table>

**Biological Safety**

| Andrew Wattrett     | Institute Biological Safety Officer              | Phone 46070 or 46118 |

**First Aid**
Listed below are the extensions of First-Aiders on site who can be called to provide immediate help. Their details are in First Aid boxes and on Safety Notice Boards.

<table>
<thead>
<tr>
<th>Name</th>
<th>Area</th>
<th>Contact Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEAHURST</td>
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<td></td>
</tr>
<tr>
<td>Dave Jones</td>
<td>Main, Research Labs</td>
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</tr>
<tr>
<td>Jenny Llewellyn</td>
<td>Main, Research Labs</td>
<td>46017</td>
</tr>
<tr>
<td>Trevor Jones</td>
<td>Main Research Labs</td>
<td>46014</td>
</tr>
<tr>
<td>Jean Routly</td>
<td>Main Building Microbiology</td>
<td>46017/46066</td>
</tr>
<tr>
<td>Jan Brett</td>
<td>Main Offices</td>
<td>56060 or 07807 106623</td>
</tr>
<tr>
<td>Clare Kenny</td>
<td>Main Building</td>
<td>56001</td>
</tr>
<tr>
<td>Gill Barker</td>
<td>Main Building</td>
<td>46196</td>
</tr>
<tr>
<td>David Pattwell</td>
<td>Zoonosis Centre</td>
<td>56070 or 07973 247934</td>
</tr>
<tr>
<td>Nicky Clarke</td>
<td>Equine</td>
<td>56289</td>
</tr>
<tr>
<td>Sue Littler</td>
<td>Equine</td>
<td>46034</td>
</tr>
<tr>
<td>Jane Devany</td>
<td>Equine</td>
<td>56017</td>
</tr>
<tr>
<td>Sarah Baldock</td>
<td>Equine</td>
<td>46034</td>
</tr>
<tr>
<td>Katy Dorricott</td>
<td>Equine</td>
<td></td>
</tr>
<tr>
<td>Rachel Rankin</td>
<td>SATH</td>
<td>56151</td>
</tr>
<tr>
<td>Louise Dale</td>
<td>SATH</td>
<td>07515 465047</td>
</tr>
<tr>
<td>Natalie Saunders</td>
<td>SATH</td>
<td>56144</td>
</tr>
<tr>
<td>Kassy Jones</td>
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<td>56144</td>
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<tr>
<td>Alisa Dean</td>
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<td>56135</td>
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<tr>
<td>Laura Klimaszewski</td>
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<tr>
<td>Janis Williams</td>
<td>SATH</td>
<td>56135</td>
</tr>
<tr>
<td>Holly Riding</td>
<td>SATH</td>
<td></td>
</tr>
<tr>
<td>Nick Dath</td>
<td>SATH</td>
<td></td>
</tr>
<tr>
<td>Jenni Mattisson</td>
<td>SATH</td>
<td></td>
</tr>
<tr>
<td>Greg Dregg</td>
<td>SATH</td>
<td></td>
</tr>
<tr>
<td>Amy Jones</td>
<td>SATH</td>
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<tr>
<td>Joan Freeman</td>
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<tr>
<td>Liz Sweeney</td>
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<td></td>
</tr>
<tr>
<td>Holly Riding</td>
<td>SATH</td>
<td></td>
</tr>
<tr>
<td>Hannah Atkinson</td>
<td>Main Building SATH</td>
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</tr>
<tr>
<td>John Blagbrough</td>
<td>PM Room</td>
<td>46070</td>
</tr>
<tr>
<td>Helen Smith</td>
<td>PM Room</td>
<td>46070</td>
</tr>
<tr>
<td>Ben Jones</td>
<td>PM Room</td>
<td>07970 247254</td>
</tr>
<tr>
<td>Elena Fitzpatrick</td>
<td>Histology (Oxenhale)</td>
<td></td>
</tr>
<tr>
<td>John Cameron</td>
<td>Wood Park Farm</td>
<td>07881 444318</td>
</tr>
<tr>
<td>Andrew Parkinson</td>
<td>Wood Park Farm</td>
<td>56351</td>
</tr>
<tr>
<td>Jo Oultram</td>
<td>Farm Animal Practice</td>
<td>07809 355354</td>
</tr>
<tr>
<td>Alistair Fletcher</td>
<td>Farm Animal Practice</td>
<td>46052</td>
</tr>
<tr>
<td>Amanda Davidson</td>
<td>MBE</td>
<td>46007/46155</td>
</tr>
<tr>
<td>Anna Rogers</td>
<td>MBE</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Location</td>
<td>Phone Number</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Sue Jopson</td>
<td>Block B</td>
<td>07970 247534</td>
</tr>
<tr>
<td>Marion Pope</td>
<td>Oxenhale</td>
<td>56030</td>
</tr>
<tr>
<td>Valerie Tilston</td>
<td>Oxenhale</td>
<td>56293</td>
</tr>
<tr>
<td>Dee Connolly</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Mandy Dennis</td>
<td>Ness Heath Farm</td>
<td>07970 247670 / 07970 247390</td>
</tr>
<tr>
<td>Ray Ellis</td>
<td>Ness Heath Farm</td>
<td>46106</td>
</tr>
<tr>
<td>Liam Roberts</td>
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</tr>
<tr>
<td>Lee Moore</td>
<td>VTS</td>
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</tr>
<tr>
<td>Mick Jones</td>
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</table>

**Automated External Defibrillator**

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ian Howard</td>
<td>Security</td>
<td>07973 247924/ 46003</td>
</tr>
<tr>
<td>Darren Grant</td>
<td>Security</td>
<td>07973 247924/ 46003</td>
</tr>
<tr>
<td>Barry Keates</td>
<td>Security</td>
<td>07973 247924/ 46003</td>
</tr>
<tr>
<td>Trevor Jones</td>
<td>Main</td>
<td>56052/ 07751 792511</td>
</tr>
<tr>
<td>Bob Read</td>
<td>Main</td>
<td>46058</td>
</tr>
<tr>
<td>Karen Ryan</td>
<td>Main</td>
<td>07984 267532</td>
</tr>
<tr>
<td>Jean Routly</td>
<td>Main</td>
<td>46017</td>
</tr>
<tr>
<td>Dave Jones</td>
<td>Main</td>
<td>46070</td>
</tr>
<tr>
<td>Helen Smith</td>
<td>PM room</td>
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</tr>
<tr>
<td>Gill Barker</td>
<td>School Office</td>
<td>46196</td>
</tr>
<tr>
<td>Philip Stratford</td>
<td>Ritchie</td>
<td>07807 106751</td>
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<tr>
<td>Jan Smith</td>
<td>Equine</td>
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</tr>
<tr>
<td>Fiona Thompson</td>
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<td>56078</td>
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<td>Nicky Clarke</td>
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</tr>
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<td>Katy Dorricott</td>
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<td>John Cameron</td>
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<td>07881 444318</td>
</tr>
<tr>
<td>Erin Coulter</td>
<td>Ness Heath</td>
<td>07926 123045</td>
</tr>
<tr>
<td>Mandy Dennis</td>
<td>Ness Heath</td>
<td>07970 247670 / 07970 247390</td>
</tr>
<tr>
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<tr>
<td>Marion Pope</td>
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<tr>
<td>Elena Fitzpatrick</td>
<td>Histology (Oxenhale)</td>
<td></td>
</tr>
<tr>
<td>Debbie Wilson</td>
<td>Zoonosis Building</td>
<td>56059</td>
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</table>
**Automated External Defibrillator**

SATH

All staff are given basic instructions on use of the AED during their induction. The following have been specifically trained on EFAW and AED.

<table>
<thead>
<tr>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td>Nick Dath</td>
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<tr>
<td>Jenni Mattisson</td>
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<td>Greg Dregg</td>
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<td>Amy Jones</td>
<td>SATH</td>
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<tr>
<td>Joan Freeman</td>
<td>SATH</td>
</tr>
<tr>
<td>Holly Riding</td>
<td>SATH</td>
</tr>
</tbody>
</table>
Safety Management and Organisation

Safety Committees – Leahurst & IVS H & S Committees

Safety and Bio-security Committee (including Regulatory Affairs)

Monitors, audits and overseas health, safety and bio-security matters, including the production of local guidance and policy in line with University policies. The committee formally reports to the Faculty and Institution Regulatory Affairs Committees, but will highlight emerging issues of concern to Heads of Departments and Institutes and to the Executive PVC for the Faculty of Health and Life Sciences as appropriate.

Chair (& Chair of Biosafety and LGMSC) ......................................................... Paul Wigley
Chair of Biosecurity and Infection Control ..................................................... Dorina Timofte
Chair of Radiation Safety .............................................................................. Fraser McConnell
Institute Technical Manager ........................................................................... Deborah Wilson
Institute Safety Co-ordinator ........................................................................... Michelle Mainwaring
Institute of Biological Safety Officer / Union Rep. ............................................ Andrew Wattret
Equine Safety Co-ordinator ............................................................................ Helen Braid
MBE Safety Co-ordinator ................................................................................ Amanda Davidson
Ness Heath Farm Safety Co-ordinator ............................................................... Nigel Jones
Pathology Safety Co-ordinator ........................................................................ Tony Brandwood
Research Labs Safety Co-ordinator ................................................................. Jan Brett
SATH Safety Co-ordinator ................................................................................ Rachel Rankin
VTS Safety Co-ordinator .................................................................................. Lee Moore
Wood Park Farm Safety Co-ordinator ............................................................... John Cameron
Administrative PSS Representative ................................................................. Sylvia Yang
Equine Hospital Head Nurse ............................................................................ Jane Devaney
Post-Mortem Room Representative ................................................................. Julian Chantrey
Research Students Representative ................................................................. TBC
University Biological Safety Officer ................................................................. Lesley Andrews

Right to attend

Head of Institute ............................................................................................... Susan Dawson
Institute of Veterinary Science Institute Manager ............................................ David Pattwell
Institute of Infection and Global Health (IGH) Institute Manager
Institute of Integrative Biology (IIB) Institute Manager
Institute of Ageing and Chronic Disease (IACD) Institute Manager
IGH, IIB and IACD Institute Safety Coordinators

One meeting a year will incorporate an annual review. Senior Managers should attend this annual review.

The various sub-committees and groups below assist the site safety supervisor in carrying out the day-to-day health and safety responsibilities, committee details https://www.liv.ac.uk/intranet/veterinary-science/safetyandbiosecurity. These groups meet bi-annually, and report back to the Safety and Biosecurity Committee at its half yearly meetings.
**Biohazard and LGMSC**
This Committee reports to the Safety and Bio-security Committee and works closely with the University Biological Safety Adviser (UBSA). It is responsible for overseeing the guidance and monitoring safe handling of organisms, both pathogens and genetically modified organisms (GM) used during research. It promotes good practice for work with biological agents, biological materials and GMO’s among Leahurst and IVS staff and students.

Biohazard Chair  
GM user representatives  
IGH, Research  
CL3 Supervisor  
SAVSNET  
Pathology  
Microbiology  
Clinical Pathology  
Safety Co-ordinator  
Biological Safety Officer  
University Safety Adviser (Biological)  
Occupational Health Consultant  
Right to attend  

Paul Wigley  
Nick Evans  
Jane Hodgkinson  
Jan Brett  
Alan Radford  
Richard Blundell  
Iuliana Maciuca  
Sue Quinn  
Michelle Mainwaring  
Andrew Wattret  
Lesley Andrews  
Luke Walsh  
Dorina Timofte

**Biosecurity and Infection Control**
Disease control, surveillance & bio-security are priorities for the Institute of Veterinary Science. This group reports to the Safety & Bio-security Committee and incorporates the Hospital Infection Control Working Group (HICWG). It provides guidance, information and protocols to minimise the risk of animal disease transmission onto and within the University campus also to outside clients from our premises to minimise the shutdown risk of our hospitals and clinics and thereby to protect operational capabilities. It provides a platform for response to disease threats, ad hoc advice, and liaison with external agencies and stakeholders, as required. HICWG undertake enhanced, coordinated infectious disease surveillance, control and research; minimise the risk of infection to our patients, optimise patient care, to provide reassurance to referring veterinarians and clients. By monitoring and reducing infection they protect hospital personnel, students and the public from zoonotic infections; provide a platform for response to disease threats and minimise the risk of shutdown of our hospitals and clinics so protect our operational capabilities.

Bio-security Chair  
Users Representatives  
Pathology  
Equine  
SATH, Clinical  
Surveillance  
Equine, PSS  
LHW  
IGH, Research  
Microbiology  
SATH, PSS  
Safety Co-ordinator  
Right to attend  

Dorina Timofte  
Julian Chantry /Richard Blundell  
Cajsa Igren  
Vanessa Schmidt  
Ann Courtenay  
Jane Devaney  
Niall Connolly  
Nicola Williams  
Christine Ellis  
Rachel Rankin  
Michelle Mainwaring  
Paul Wigley
**Radiation Safety**

The Radiation Safety Group (RSG) reports to the Safety and Bio-security Committee. Through working closely with the Radiation Protection Office, it is responsible for oversight of radiation safety and for ensuring the safe use of radioactive materials and all sources of ionizing and non-ionising radiation throughout the campus. The RSG is responsible for overseeing the guidance and monitoring of radiation protection on site to ensure the protection of employees, students and members of the general public, whether involved in research or clinical work, and for the protection of the environment to ensure compliance with University and national regulations.

<table>
<thead>
<tr>
<th>Chair</th>
<th>Fraser McConnell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users Representatives</td>
<td>Rachel Rankin</td>
</tr>
<tr>
<td>SATH</td>
<td>Jane Devaney</td>
</tr>
<tr>
<td>PLEH</td>
<td>Rob Smith</td>
</tr>
<tr>
<td>LHW</td>
<td>Catherine Finnegan</td>
</tr>
<tr>
<td>UVP</td>
<td>TBC</td>
</tr>
<tr>
<td>Leahrust Research Laboratories</td>
<td>Paul Wigley</td>
</tr>
<tr>
<td>Academic Lead</td>
<td>Michelle Mainwaring</td>
</tr>
<tr>
<td>Institute Safety Coordinator</td>
<td>Deborah Wilson</td>
</tr>
<tr>
<td>Institute Deputy Safety Coordinator</td>
<td>Peter Cole</td>
</tr>
<tr>
<td>University Radiation Protection Officer</td>
<td></td>
</tr>
</tbody>
</table>

**Health & Safety Annual Review**

Safety plans and audits will be reviewed biannually and are independent of the biannual Safety and Biosecurity Committee meeting. This review process will be chaired by Prof Paul Wigley. HOD’s to attend this annual review.

**Safety Inspections and Safety Audits**

**Safety Inspections**

Each of the areas listed below covering the Institute of Veterinary Science must undertake a bi-annual safety inspection. May and November. The inspection is carried out by the safety coordinator for that area sometimes in conjunction with the Institute Safety coordinator or their deputy and at least one inspection should be accompanied by the Head of Institute or Academic Lead for H&S. Each area must produce a report outlining safety issues and concerns and then action these points. This information can form part of the hazard inventory and safety plan for that area. Completed safety inspection reports are sent to the Institute Safety Coordinator and are discussed at the biannual Safety and Biosecurity meetings.

**Safety Inspection Areas**

1. Research Laboratories
2. Pathology
3. SATH
4. VTS
5. UVP
6. Equine
7. MBE
8. FAP/LHW
9. Wood Park Farm
10. Ness Heath Farm
11. Library
12. Office Buildings (Annually)
**Safety Tours**
A safety tour is different to an inspection in that it is time limited (20-30 minutes). Rather than look more broadly across health and safety systems and arrangements. Ideally, the tour should not only concentrate on identifying obvious unsafe acts and unsafe conditions but should involve discussions with staff on their understanding of the safety measures in place, their overall impression of health and safety management in their area and whether they believe there are areas where improvements should be made.
Senior managers and Heads of Department should complete 1 tour a year.

The IVS Safety Coordinator will arrange the Safety Tours.

**Safety Audits**
The Institute undergoes an annual hazardous waste audit examining how we manage all hazardous waste produced from the site. There is also an annual dangerous goods audit. The Institute is also audited every 3 years by the SAO on its management of health and safety. Each individual area as detailed above undergoes a separate, comprehensive audit. The findings are passed to the Academic Lead for H&S and an action plan is drawn up to correct any deficiencies. This plan is reviewed by the auditor after 12 months. The University Strategy is for to achieve “substantial” level of assurance All areas will be expected to introduce these measures by the end of the academic year 2017-18. The period 2018-19 will be used by the Safety Adviser’s office to undertake verification audits to check compliance. Any actions arising from these must be dealt with by the completing department/area.

**Safety Plans and Hazard Inventories**
Each area (as detailed above) must produce a safety plan and a hazard inventory of the particular risks in their area.
Institute of Veterinary Science Safety Information

Various risk-based Codes of Practice (COP) and Standard Operating Procedures (SOP) have been developed for all activities within the institute and are available locally and may also be accessed at https://www.liv.ac.uk/intranet/veterinary-science/safetyandbiosecurity/. They must be read, understood and acted upon by all staff. Supervisors and deputy safety coordinators will offer further guidance on COP and SOP in their area.

Individuals from all institutes must follow the information contained in this document when carrying out any work in the Institute of Veterinary Sciences or on visits to external premises (such as client’s premises, field sites etc.) unless local regulations apply. Individual variations pertaining to a specific site or function will take the form of risk assessments and be appended to this document.

Campus Safety

Driving, parking and cycling at Leahurst
There are certain areas of the roads that are marked with yellow cross-hatching indicating they need to be kept clear of parked cars for reasons such as deliveries, access for service vehicles and also in case of fire when a Fire Tender or ambulance would need to come as close to a building as possible. Cars MUST NOT park in any of these areas.

Staff and students at Leahurst must also have current parking permits displayed in their vehicles so as to locate the owner of a vehicle if their car/van is causing an obstruction. Permits can be obtained from the Admin Office in the Main Building. For short-term visitors to Leahurst and the University Practice, temporary permits can also be obtained from the Admin Office. These should be returned at the end of the visitor’s stay.

The Leahurst campus speed limit on site is 10 mph. Animals can, and do, get loose at times and this should always be considered when driving on site as should the fact that there are few walkways and the number of pedestrians, including animal owners and visitors, has increased considerably. Additionally many staff and students cycle to Leahurst and motorists must be aware of these vulnerable road users. Do not overtake cyclists on the cattle grids in addition to the road being narrow the vibration can cause the cyclist to waver. The Highway Code still applies on the Leahurst campus. Please obey the 10 mph limit at all times. A generic risk assessment for vehicle and pedestrian safety is available from the Safety Advisors Office.

Crossing the A540
Vehicles coming from the direction of Chester and crossing the central reservation to enter Leahurst HAVE THE RIGHT OF WAY. Vehicles intending to turn right from the main entrance to go to Neston MUST GIVE WAY TO TRAFFIC COMING FROM CHESTER and allow them to cross first.

Traffic MUST NOT double up on the central reservation when crossing the A540 to head toward Neston. A horse-box or delivery vehicle coming from the Chester direction would not be able to get past the two vehicles to turn in to Leahurst if two cars are abreast of each other on the reservation. The horse-box would then block the view of the drivers of the cars and a very nasty accident could occur. Even if there is no horse box the car doubling up could still restrict the view of the other driver preventing him/her from moving off safely. Please cross the road in SINGLE FILE and take the inside lane of the dual carriageway. Under no circumstances should you pull out into the outside lane when cars are travelling toward you in the inside lane.
Fire Safety
An extensive fire would cause a great deal of damage and focus should be made on preventing a fire. Some basic principles should be adhered to:
- “Good housekeeping” should be practised to minimise fire risks. Combustible or flammable material should not be allowed to accumulate;
- Naked flames must never be left unattended;
- Combustible material should not be left near a source of heat;
- Electrical equipment should be correctly connected, and receive a regular safety check;
- Electrical equipment should not be left switched on overnight, unless designed to be permanently connected;
- Overnight experiments require a permit;
- Precautions should be taken against the risk of arson, by securing the building at night;
- Any furniture with damaged covering, showing foam, should be repaired or scrapped;
- The University is a no-smoking area;
- LPG (propane or butane) heaters are best avoided because of the increased risk they entail;
- Flammable liquids in containers of 500ml or more should be kept in fire resisting bins or cupboards when not actually in use. Minimum amounts of flammables should be kept in labs or work rooms, and never more than 50 litres. Larger amounts should be kept in a purpose-made solvent store;
- Cylinders of compressed flammable gas, including LPG, if the use is expected to continue in the same place for more than 3 years, should be piped in from outside or from a fire-resisting enclosure with ventilation to the outside. Electrical equipment within 1 metre of a flammable gas/LPG cylinder valve or outlet should be spark-proof;
- “Hot work” (welding, cutting, use of blow lamps etc.) carries particular risk of fire. Combustible material must be removed from the area, appropriate fire extinguishers should be available, and a careful watch for fire must be made during and after work.

Smoking
All parts of the University are now smoke-free except for flats and individual study bedrooms in residences. Staff and students should not smoke close to building entrances, where those entering or leaving may inhale smoke, nor near open windows, but should move a reasonable distance away. The University has a Code of Practice on smoking that can be found here.

Building Faults
Building faults in the laboratories should be reported to the local safety co-ordinator responsible for the area (see Page 7). For building faults in Leahurst House these should be reported to Fred Rylands (56077). Faults can be reported to the FRCS Helpdesk by phoning 43000 and giving your staff number, building number and space reference.

Visitors
If you arrange for a visitor to come on site, please make sure that they are escorted at all times, and that they know the emergency evacuation procedure and location of the emergency exits and assembly points. They should sign the visitors book at main reception.

Contractors
Service engineers, domestic and Facilities Management staff must not be placed at risk from contaminated or dangerous equipment and materials. All areas must be left in a safe condition and a Permit-to-Work or similar permission be produced, where appropriate. When working off site e.g. on farms consideration must be given to the safety of local workers. For details of safety considerations and a generic risk assessment which can be used when contractors are working on University premises see here.
Biosecurity
Disease control, surveillance and biosecurity are priorities for the Institute of Veterinary Science. It is important to be aware of, and have in place procedures to minimise, the transmission of infectious diseases. More information is contained in the section on site specific hazards

General Health and Safety Information

Safety Awareness
ALL supervisors have a general responsibility to ensure that all safety procedures and practices relevant to the work in their group are followed by both staff and students. They must ensure that anyone joining the group, e.g. academic, administration, technical staff, research / undergraduate students, or a visitor is given instruction about the particular hazards associated with the work of the group and that risk assessments are produced before any projects are started.

Training
Every supervisor must take into account the capabilities of their staff as regards to health and safety and provide them with adequate training at recruitment, when new work begins or if they are being exposed to any increased risks in their role. The Institute is committed to continuous improvement in all aspects of health and safety and in securing the competence of its staff in their health and safety duties. Staff will be provided with relevant training to enable them to carry out their role. Training records will be kept locally and reviewed annually. Details of training available through the Safety Advisors Office can be viewed here.

Induction
Induction training is provided to all following appointment and is supplemented by additional instructions and training as appropriate.
All new staff and research students will receive a copy of this handbook during their induction to working at the University as the basis of their safety training. Staff and students will be required to sign a statement that they have read and understood this code (see Appendix 1) or the equivalent on their safety induction forms. Supervisors will provide further instruction on local safety procedures specific to their work and arrange any additional safety training required.

Work Experience
The University recognises that many departments across the institution provide work experience opportunities to young people from the local community. Guidance notes are available on the Human Resources website to ensure young people receive the necessary consideration / protection and ensure the University’s statutory obligations and working practices are met. Specific health and safety guidance is available here.

New and Expectant Mothers
All new and expectant mothers are subject to the risk assessment procedure to ensure that they are protected from physical, chemical and biological agents and working conditions within the working environment. The risk assessment should be reviewed during the pregnancy.
Hazard Identification, Assessment and Management

Risk Assessment

*Most of the hazards in the University that are common to several departments have already been assessed, and the findings have been circulated in the form of Codes of Practice or generic risk assessments (see above section on Information and documentation).*

The principles of, and an approach to, risk assessment can be found [here](#) and in [SC-42](#).

University generic risk assessments for the following can be found [here](#):

- Contractors
- Laboratories
- Classrooms
- Offices
- Occasional Manual Handling
- Laptops
- Open Days

Universities have a legal duty to provide the necessary supervision to ensure the health and safety of staff, undergraduate / research project students. It is the responsibility of the supervisor to ensure that the project is properly assessed for compliance with university requirements and codes of practice for general risks to health and safety. If these risks are significant a written risk assessment is required. Hazards that are not adequately covered by University-wide assessments require specific assessments. The relevant local or university committees should be consulted when preparing risk assessments for experiments involving GM organisms, the use of radiation and animals. The principal investigator must also obtain the relevant licensing authority and permissions. Research work must be subjected to a risk assessment by the member of staff responsible for supervising the project, or the area in which the work is carried out. Each member of staff and research students must be made aware of the details of the assessments and of the measures required to reduce the risk of identified hazards.

There must be a risk assessment identifying the risks associated with any project and measures that can be put in place to reduce these risks before work begins. The project should be continually reviewed for further risks as the work progresses and experimental procedures develop. Research students should be involved in the preparation of risk assessments, but these assessments can only be authorised by safety Co-ordinators or academic supervisors.

Any person who authorises risk assessments must be competent, i.e. have a knowledge of the risk assessment process, be familiar with the hazards and risks associated with the task and activity and have the authority to stop activities taking place should the risk assessment be considered substandard.

Risk Assessment forms are available from the safety coordinator and on the University Safety Advisor’s [website](#).

Copies of Risk Assessments must be given to the local safety coordinator to be kept on file as they may be requested by the University Safety Adviser, or external regulatory and accrediting bodies.

**Control of Substances Hazardous to Health (COSHH)**

Information on the [Control of Substances Hazardous to Health (COSHH)](#), including risk assessment forms, are available [here](#) with more details in the COP for [COSHH](#).

The Control of Substances Hazardous to Health regulations require that substances hazardous to health have a suitable and sufficient assessment of the risks involved and the precautions required.
COSHH applies to microbiological hazards, dangerous pathogens, hazardous chemicals, mixed substances and substantial quantities of dust.

**Standard precautions** is a generic assessment covering most laboratory work. The University Safety Advisor has produced standard precautions to cover such work. Where they do not apply, or in cases of doubt, a Specific Assessment is required using the standard form. **Specific Assessments** If you are working in a laboratory, unless you are using standard precautions (see COP on COSHH)) the specific COSHH assessment form should be used for written assessments. It must be produced if the substance is a carcinogen / teratogen / asthmagen and must be authorised by a member of the academic staff.

Before working with hazardous substances you must always familiarise yourself with the COSHH Assessment /Standard precautions and associated Safety Data Sheets as well as the Protocol for the experiment. **Chemical spills** - The COSHH Assessment must contain actions to take in emergency. In addition, familiarise yourself with any Local Rules regarding what action to take if a spill occurs and equipment provided in the Lab you are working to support this, e.g. Spill Kits, First Aider / Emergency Contact details.

In the event a chemical spill does occur you may think you are doing the right thing by clearing it up immediately. **BUT REMEMBER: YOURS AND OTHER PEOPLE’S SAFETY COMES FIRST.** If in doubt raise the alarm and evacuate. Inform the Laboratory Supervisor / Technician / DSC immediately.

**Asbestos**
Asbestos is present in many of the buildings across the Leahurst Campus and in the Thompson Yates building but to a lesser extent. Asbestos containing materials (ACM’s) still exist within the University. They can be found in a number of forms:
- Lagging and sealant material around pipework
- Ceiling tiles Linings to cold or warm rooms and on radiator covers
- Laboratory worktops, shelving and linings and ductwork in fume cupboards
- Linings to doors and other panels/partitions acting as fire protection
- Ceiling coatings (e.g.Artex) Roofing Sheets (flat or corrugated)
- Brake linings (e.g. in lifts)
- Work equipment, e.g. ovens
- Residue material from all the above

If left in situ in an undamaged state ACM’s pose very little risk to the building occupants. ACM’s only become a problem when they are disturbed and fibres are released. Inhaling asbestos fibres can cause cancer. Staff awareness of ACM’s in buildings will be identified with a label similar to those below: The FRCS Policy on Asbestos Management is available [here](#) and further information from the SAO can be found [here](#). An annual reminder to staff about ACM’s will be issued.
Display Screen Equipment (DSE)
The Health & Safety (Display Screen Equipment) Regulations 1992, as amended require that subject to certain criteria, all DSE workstations must meet minimum Health & Safety requirements, and require assessment to check this. Where workstations are used by designated ‘Users’ (i.e. those who habitually use DSE as a significant part of their work) each department needs to assess each workstation and produce a detailed assessment for each user. Workstations and seating must be suitable both for the person and for the work being carried out. Materials and frequently used equipment or controls should be within easy reach without undue bending or stretching. The position of the workstation should be such that any glare or bright reflections on the screen are avoided. Seating should where possible provide support for the lower back, and a footrest should be provided for any worker who cannot comfortably place his or her feet flat on the floor. The worker should be seated at a suitable height in relation to the work surface. Workstations should be adapted to the special needs of individuals, including those with disabilities. Most users are able to self assess their station using the guidelines found here.

Manual Handling
All members of staff should read the Generic Risk assessment. Occasional lifting of loads up to 15kg should be safe provided the guidance in that risk assessment is followed. For occasional lifting of more than 15kg, or regular lifting of more than 30kg the Safety supervisor should be informed so that a formal assessment can be carried out. Assessments have so far been carried out for the lifting of animals at SAP and SATH, the loading and distribution of foodstuffs, movement of waste and the use of machinery such as steam cleaners at Leahurst. See Safety Advisors website for further information.

Regulations establish a clear hierarchy of measures:
- Avoid hazardous manual handling so far as reasonably practicable by redesigning the task or by mechanisation.
- Make a suitable and sufficient assessment of any hazardous manual operations that cannot be avoided.
- Reduce the risk of injury from these operations so far as reasonably practicable by mechanical assistance, reduction of load, or changing the process or the environment.

Good Housekeeping
Good housekeeping is an essential and integral part of safety. It is important that all rooms and work areas are kept tidy and unused equipment and materials stored in a safe manner and do not cause trip hazards. Many accidents are caused by falls or trips so please make sure all walk ways are kept clear and report any trip hazards, such as worn floor surfaces, to the site safety coordinator. Make sure spilled liquids are cleaned up immediately and floors made non-slippery.
Do not leave excess quantities of loose paper out on desks, benches etc. It is a known fire hazard.
Health and Safety legislation forbids the consumption of food and drinks in laboratories and “dirty” work areas.

Eating and drinking is also prohibited in the library and computer facilities. In lecture theatres water bottles and drinks from mugs with a secure closure are permitted. Common room areas are provided and should be used.

Drinking Water
Many of the cold water taps are supplied by tank water. Although regular chlorination of the tanks takes place, it is not advisable to use this water for drinking. There are designated drinking water taps in many buildings and these are clearly labeled.
Control of Legionella
The University’s Code of Practice on the control of Legionella sets out how the risks from exposure to Legionella bacteria will be controlled across the University. The primary responsibility for managing Legionella risks associated with the main hot and cold water systems rests with FRCS. However, certain local items of equipment and fixtures and fittings may also present a risk.

To reduce the risk of Legionella infection, all water taps must be run regularly. Once each month for a 1-2 minutes as a minimum. This is especially important where showers or sinks are only used occasionally. Further information relating to Legionella can be found here.

Equipment Faults
These should be reported to the local safety co-ordinator responsible for the area where the equipment is housed.

Late/Lone Working
Anyone working after hours (before 8am and after 6pm) or at weekends in any building (except SATH) must complete the afterhours book which is kept in the Main Building. Please remember to sign out as well as signing in. If you know that you are going to be the only person working in a building then please inform Security (46004; mobile 073420 67763) when you arrive and again when you leave. Lone working means intentionally working unaccompanied for an extended period of time – it is not the same as, say, being the only one in a laboratory for a short time as may happen during a normal working day. If you need to work alone during normal hours, and there are significant hazards beyond the normal hazards found, e.g. in office work, you need a specific risk assessment. The risk assessment should consider the potential for an accident where the lack of immediate assistance may be a problem. If you cannot avoid lone working, additional precautions should be considered such as:

- Using devices to raise alarms (either in the event of emergency, or automatically in the case of lack of movement);
- Maintaining regular contact with another member of staff by telephone (or Security out of hours);
- Making contact with someone at the start and end of the work period, letting them know where the work is being carried out and for how long; or
- Ensuring that someone carries out a physical check on the lone worker at regular intervals.
- Consideration must be given to any additional risks presented by working alone such as the potential for an accident where the lack of immediate assistance may exacerbate the problems. All potential hazards must be considered, not only biological.

Please see the University’s Policies on Late Working and Lone Working. Undergraduate students are not permitted to work in the laboratories unsupervised after hours or at weekends. No work is permitted in the CL3 laboratory after hours.

Use of University Vehicles
The Institute of Veterinary Science owns a number of mini-buses, cars and vans for use by staff and students. To become a permitted user applicant must fill out a ‘Driver Declaration Form’ (available from the School Administration Office, Main Building Leahurst) containing their insurance details and drivers license details. All applicants must be over 18, have valid insurance and have the appropriate credentials on their license to drive mini-buses or vans up to a certain limit. The University’s Code of Safe Practice for Minibuses is available here. It applies to the use of University-owned, leased or hired minibuses for teaching, research and other University activities.
**Electrical Testing**
The Director of Facilities Management is responsible for the [electrical mains supply](#) and distribution to all buildings and all permanent electrical equipment on site such as lighting, sockets, fire alarms, clocks, telephones, cranes.

All portable plug-in electrical appliances must undergo a [three-yearly comprehensive check](#) by a competent person. Across the Institute there are a number of trained PAT testers available to carry out electrical testing. Please contact the Safety Coordinator for further details. This inspection involves a physical check of the plug lead, a fuse rating check, an insulation test and an earth continuity test. All equipment thus tested carries a green ‘Tested’ label that is dated. If equipment is found without an ‘in-date’ test label it should not be used and the safety supervisor should be informed.

**Personal Protective Equipment**
The Personal Protective Equipment (PPE) at Work Regulations apply mainly to footwear, gloves, eye and head protection, masks, laboratory coats, gowns and overalls. White laboratory coats, Howie-type laboratory coats, theatre gowns, scrub suits, overalls, waterproof coats, leggings, wellingtons etc. along with disposables such as gloves and overshoes are provided for general protection in different areas.

- Howie-type coats must be worn at all times when working in the laboratories
- Protective clinical clothing of the appropriate colour is worn in hospital or clinical environment.
- Theatre gowns must be worn in the hospital theatres
- Overall and waterproof clothing are required for farm work

Whatever PPE you are using should be removed before leaving the working environment. Scrubs and overalls should not be worn off campus except for fieldwork. Laundry Facilities to launder PPE are generally available at point of use in the hospital and laboratories so should not be taken off site. Gloves and masks should be disposed of via the yellow clinical waste stream NEVER as domestic grey bin waste.

**No protective clothing should be worn in areas designated as clean areas.** These are well signed and include:
- Leahurst Main Building (outside of laboratories and the PM room area)
- Leahurst House
- Ritchie House
- Zoonosis Centre Building
- Libraries
- All tea rooms, canteen areas or offices
- Public areas not part of working environment

Any special protective equipment required will be specified in the relevant risk assessment and once provided must be maintained in good condition and kept clean. Proper storage must be provided for equipment not in use. Further details on PPE can be found [here](#) and in this specific code of practice.

Safety goggles will be available for eye protection and must be worn for any job where there is a potential hazard of chemical or biological splashes or flying particles. Staff will be provided with plain spectacles or subsidised prescription safety spectacles by the department if there is a need to regularly wear eye protection. Gloves must be hypoallergenic, non-latex and non-powdered. If difficulty is experienced using these gloves, then slightly powdered gloves may be used provided that they are hypoallergenic and contain less than 50 micrograms/gram extractable protein. The use of latex gloves requires a specific risk assessment, and regular health monitoring following application to the Occupational Health Office. Face fit masks may be required in certain [circumstances](#).
Work at Height
All working at height has to be properly planned, properly supervised and carried out in a safe manner. Work should not be carried out in adverse weather conditions that could affect the safety of those involved.
Those involved in working at height activities must be competent.
Working at height must be avoided where possible and carried out from ground level.
If work has to be carried out at height, then measures must be introduced that prevent a person from falling, or failing this, measures must be introduced that minimise the distance and consequences of a fall. Further information can be found here.
Site Specific Hazards

Biosecurity

With so many staff, visitors, clients and animals entering and leaving the premises each day; along with the diagnostic and experimental laboratories (including post-mortem rooms) handling a range of animal tissues and other samples, it is important to be aware of, and have in place procedures to minimise, the transmission of infectious diseases. Local codes of practice and disinfection procedures must be followed. These can be found here. General information on bio-security in the University can be found here here. Additional advice on bio-security on farms can be found at the Defra website.

Large Animal Facilities

There are particular risks associated with the University’s farms and large animal facilities (Ness Heath Farm, Wood Park Farm, Farm Animal Practice, and Equine Hospital/Practice). Staff and students must be trained in safe working practices and must not be given a new task or asked to operate any equipment or machinery until they have received the appropriate training. Work must be carried out in an orderly and tidy manner. Sufficient time must be allocated for a task to avoid rushing as this could lead to carelessness and an increased accident risk.

University premises, equipment and machinery must be properly maintained. Equipment must not be used without appropriate training, if it is in need of repair or is in any way defective. Adequate safety equipment should be provided and must be used when appropriate. All machinery must be effectively guarded and must not be used if guards are faulty. Machinery must be handled/driven in a safe manner - for example in reversing, trailer tipping etc. Extra care should be taken in wet or frosty weather conditions. More information is available at the Defra website.

Working with Animals

Staff, students and visitors may be directly or indirectly exposed to live animals, and animal tissues and products. Potential hazards from working with animals include allergies, physical injuries and zoonotic infections. The University has drafted a Code of Practice to establish safe working practices.

Any person working with animals must read and follow the relevant risk assessments, guidelines and standard operating procedures outlined in the code of practice. Staff must justify the need for, and carry out a risk assessment for, any exceptional work involving animals that is not covered in these documents. Work on client’s premises must be undertaken with the same safety standards found on site and risk assessments must be in place. Visitors (e.g. staff from the main campus, Facilities Management, Computing Services, outside contractors etc.) should be made aware of any risk and given appropriate guidelines.

All large animals can be unpredictable (horses, cattle, sheep or pigs). They should be handled quietly and with appropriate handling facilities. There must always be more than one person present when bulls or cows with calves are being handled – never do this type of work alone. Students treating horses in loose-boxes should always work in pairs. Further information can be found in the document ‘Working with Animals – Risk Assessments and Guidelines’, available on the web at: www.liv.ac.uk/vets/safety. All chemicals and drugs must be stored in clearly labelled containers. They must be handled and used in accordance with the COSHH regulations. The precautions to be taken against other particular risks are detailed in Farm Wise literature from the Health and Safety Executive which is kept in the Farm Managers’ offices and on www.liv.ac.uk/vets/safety
Zoonotic Infection
Staff and students are to be made aware of any risk of zoonotic infection and are to take the necessary safety precautions. Pregnant women and people with conditions resulting in compromise of the immune system must take extra care to avoid exposure to zoonotic infections. It is advised they consult with their supervisor to carry out a full risk assessment.

Assessment should identify if there are any hazards that would pose risk to new and expectant mothers. Staff and students with other particular risks (e.g. physical impairments, allergies, immune suppression etc.) should inform the School so that a full risk assessment and implementation of appropriate measures can take place. For the majority of working conditions, risks will be adequately controlled using standard controls/precautions. However, all female staff and students of child-bearing age should be informed of any risks and of the need to tell the University if they become pregnant. See Safety Circular SC66/4.

Hand Hygiene
For both biosecurity and infection control risk good hand hygiene is extremely important. Poor hand hygiene spreads some of the micro-organisms which cause infections. While hand hygiene seems quite simple, a lot of people don’t actually do it properly. See local guidelines for further details.

Dermatitis
Dermatitis is a skin condition which can result from contact with irritants. The signs of dermatitis include, dry, red and itchy skin, swelling, blistering and cracking of the skin. Basic precautions to prevent dermatitis include are as follows. Avoid contact with materials that cause dermatitis. Protect the skin with suitable gloves. Check for early signs of dermatitis and contact a medical practitioner.

Noise
Information on noise regulations can be found at

The Control of Noise at Work Regulations (2005) is based around a set of noise levels that are an average over an 8 hour period:

1. Lower exposure action value - LEAV (80dBA and a peak of 135 dBC)
2. Upper exposure action value - UEAV (85dBA and a peak of 137 dBC)
3. Exposure limit value - ELV (87dBA and a peak of 140 dBC)

If either the LEAV or the UEAV are exceeded then action must be taken. This might include:

- Carry out a noise risk assessment.
- Eliminate or reduce to as low as possible the noise risk.
- Provide hearing protection and hearing protection signs.
- Maintain equipment for controlling noise.
- Provide health surveillance, instruction and training to staff who could potentially be exposed.
- At no time can the ELV be exceeded (including when wearing hearing protection). Noise assessments have been carried out in a number of areas across the University. Areas/activities in the Veterinary School and Leahurst Campus where noise has been identified as a problem are:
  - Nursing staff working in dog kennel areas. An example of this is the barking from dogs in the SATH kennels where disposable ear plugs are available if requested.
  - Farm workers working with noisy animals. Examples of this are working with pigs in enclosed pig houses and tractor driving. Ear defenders are issued to workers in this category.
Off Site Working & Fieldwork
When staff and students are working away from the University the supervisor must take special care to establish that they are acquainted with; understand and will abide by, the local safety rules of their location. Students doing fieldwork should acquaint themselves with the Off site working code of practice and the UCEA Code of Practice for Safety in Fieldwork. Students working abroad should be familiar with the Guidelines on Placements and Overseas Work.

An Off Site Risk Assessment, form must be completed and given to staff before starting fieldwork.

Radiation
Detailed local use of radiation is available https://www.liv.ac.uk/intranet/veterinary-science/safetyandbiosecurity/radiation

Ionising Radiations

Unsealed Sources
Local Rules including Hazard Assessments are reviewed by the Radiation Safety Group; approved by the Leahurst Safety and Biosecurity Committee and the University Radiation Protection Adviser. They are intended to ensure that unsealed radioactive sources are used safely and in accordance with the requirements of “The Ionising Radiations Regulations 1999” and the associated Approved Code of Practice for the Health and Safety Executive and published by H.M.S.O. They are required in law and must be read, understood and obeyed by all staff. Any user not complying with these Local Rules or with the standard required may have their permit to work revoked and render themselves liable to prosecution.

The University has appointed Rob Smith as Departmental Radiation Protection Supervisor (DRPS) for work utilising unsealed radioactive sources at Leahurst and he shall administer the Local Rules. Detailed records are kept of all radioactive sources on the Leahurst Campus and of all disposals of radioactive waste. A monthly return of all sources purchased and waste disposed of is made on form RP2A to the University Radiation Protection Adviser (U.R.P.A.). Whenever solid radioactive waste is to be removed, application to the U.R.P.A. should be made on form RP1A and arrangements will be made for collection. Relevant documentation and forms are available on http://www.liv.ac.uk/radiation/new/document.

Registered Radiation Areas have been designated in some laboratories and the area in which radiation work is carried out must be clearly demarcated with radiation warning signage in place. Visitors should be accompanied by a radiation worker into a radiation area, cleaners should have clear, written instructions when entering such a laboratory and maintenance work on designated sinks may only be carried out after a permit to work has been issued by the DRPS.

All personnel working with unsealed radioactive sources must become registered workers. Form RP6 must be completed and returned to the Radiation Protection Office (RPO). Permission will then be given by the RPO to commence work with radioactive material.

Radiation monitors with suitable Geiger or scintillation probes for Beta and Gamma emitters are available for contamination checks for C¹⁴ and H³, swabs used with liquid scintillation counting are essential. Personal Dose Monitors are issued to staff working with gamma emitters and these are changed bimonthly. Issue will normally be done in conjunction with the Equine studies Radiographer.

X-Rays
Local Rules are issued by the relevant Hospital or Division of the Veterinary School and approved by the University Radiation Protection Adviser to specifically cover the use of each X-Ray generator at Leahurst.
Designated Radiographers at Leahurst supervise the use of these machines. The University has, for Leahurst, appointed Jane Devaney and Fraser McConnell as Departmental DRPS for radiographic techniques (including CT), Laura Blackwood for the Linear Accelerator and Alex German for the Daxa Scanner. Each will administer the relevant local rules. In Liverpool Catherine Finnegan is the DRPS for USAP.

No member of staff or student may operate an X-ray machine without the presence of a radiographer unless they have been assessed as a Competent Worker by the DRPS and are listed in the Local Rules for that machine. Each Worker must read and understand the Local Rules and relevant sections of the “Approved Code of Practice” issued by HMSO and held by the DRPS. The Radiographer shall have authority over all persons present during X-ray production; shall exclude all unauthorised / non-essential persons and will also advise on the use of protective clothing such as lead apron and gloves.

All personnel working with x-ray machines must become registered workers by completing form RP6X obtainable from the relevant DRPS and returning it to the Radiation protection office (RPO). Permission will then be given by the RPO to commence routine work with X-ray machines.

The DRPS provides Workers with two personal dose monitors (body and arm) issued by the Radiographer and changed at bi-monthly intervals.

**Implantation and Scintigraphy techniques**

The University has appointed Jane Devaney as DRPS for Implantation and Scintigraphy techniques at Leahurst.

The Operating Theatre, box D1 and the area within the barrier around box D1 are defined as Controlled Radiation Areas whilst occupied by a horse undergoing radiotherapy and until such time as the Operating Theatre or box D1 respectively should have been checked for any possible loose wires or seeds. Persons who are not Registered Radiation Workers may not enter a Controlled Radiation Area nor take part routinely in radiotherapy. The names of all persons and the reason for their presence shall be entered in the Radiotherapy Log Book. This is to ensure that duties are shared and that cumulative doses are minimised.

Only the Radiotherapy Surgeon may undertake implantation and shall be in charge of radiotherapy procedures. In that capacity they shall have authority over all persons present during treatment and shall exclude all unauthorised and unessential persons. When students under training are present to observe the techniques they should remain at the doorway to the Operating Theatre once the radioactive wires/seeds have been removed from their pots.

No member of staff or student may operate the Gamma Camera without the presence of a radiographer unless they have been assessed as a Competent Worker by the DRPS and are listed in the Local Rules for the Gamma Camera. Each Worker must read and understand the Local Rules and relevant sections of the “Approved Code of Practice” issued by HMSO and held by the DRPS. The radiographer shall have authority over all persons present during all stages of Gamma Scintigraphy and shall exclude all unauthorised and unessential persons. Only registered staff may handle radioactive sources and all staff handling sources and caring for implanted animals must wear TLD badges.

Accurate records of the ordering, delivery, use and disposal of the implanted sources must be maintained at all times.
Non-Ionising Radiation (NIR)

MRI
The University has appointed Fraser McConnell DRPS for the MRI in the Small Animal Teaching Hospital and Jane Devaney for the MRI in the Equine Hospital.

No member of staff or student may enter the MRI magnet rooms or operate any of these machines without the presence of a radiographer unless they have been assessed as a competent Worker by the DPRS and are listed in the local rules for that machine. The radiographer shall have authority over all persons present during the operation of the machines and shall exclude all unauthorised and non-essential persons.

Microwaves, lasers, UV
It has been agreed by the University's Committee on Safety that each department that uses NIR (eg lasers, UV lamps, intense lights, radiofrequency generators, microwave sources etc) should have a named and formally appointed Non-Ionising Radiation Protection Supervisor (NIRPS). The duties of the NIRPS are to closely supervise all work with NIR to an extent appropriate to the type of sources used and ensure that any work procedures (eg local safety rules) are adhered to by departmental staff. They should also maintain an up-to-date list of all departmental sources of NIR and supply copies to The Radiation Protection Office and the Safety supervisors. This is in addition to the Departmental Radiation Protection Supervisors required by departments that hold and/or use radioactive materials, x-ray generators, gamma sources etc.

At Leahurst the following are appointed NIRPS:
Jan Brett: Main Building, Wellcome Building, Farm Animal facilities
Jane Devaney: Equine Hospital, Equine Practice, Sandstone Cottage, 1952 Building
Fraser McConnell: Small Animal Teaching Hospital
Rick Humphries: MBE

Ultra-violet sources are used extensively in laboratory procedures and microscopes to demonstrate fluorescence, for visualising electrophoresis gels and for sterilisation of bacteriological cabinets. The action of ultra-violet radiation on the eye is acute, causing inflammation of the conjunctiva and long term skin effects can also result from severe exposure. No area of the body, (skin or eyes), should be exposed to UV radiation. Efficient protective face masks or shields must always be worn when ultra-violet light is being generated, goggles do not protect the exposed skin of the face. Fully gauntleted gloves must also be worn to avoid exposure to the wrist caused by separation of the lab coat sleeve from glove. Laboratories which have to be irradiated must have a fail-safe device which prevents anyone entering them when the UV light is on. Laboratories at Leahurst that have this facility are: G63, G64, G65, G65a and G41 in the Main Building. There are no laboratories with this facility in Liverpool.
All staff working with either Ionising or non-ionising radiation must undergo training in Radiation Safety by the University Radiation Protection Advisor and regular refresher training thereafter.

Gas Safety
Compressed Gas Cylinders
Detailed guidance on the safe handling of compressed gas cylinders can be found here. Compressed gas cylinders present a significant Manual Handling risk. Use the appropriate equipment or get help. Cylinders should be moved using a proper cylinder trolley. When in use they should either be secured in the trolley or chained to a wall or bench. If possible, especially flammable gas cylinders should be connected to an outside manifold and the gas piped into the laboratory or theatre. If the gas is acetylene it is illegal to supply at a pressure of more than 0.6 bar (9psi), the piping should not be of copper, and flashback
arresters should be fitted.

**Liquid Petroleum Gas (LPG)**
There is a small bulk LPG storage tank for heating at Ness Heath Farm and cylinders are used by FAP. Information on safety of bulk installations can be found on the [HSE website](https://www.hse.gov.uk). In the event of a LPG leak or fire call Security on 2222 plus LPG supplier emergency number. The LPG tank has the supplier’s emergency number printed on it. See Local and site emergency plans for more information on an emergency situation involving LPG.

**Mains Gas**
All laboratories in the main building (901) and Wellcome Building (928) at Leahurst are equipped with ‘Gas Guard’ alarm systems which will detect excess gas in the laboratory due to a gas leak. If at any time you smell gas, switch off any gas supply if possible, open a window, please warn colleagues, then evacuate the area and contact emergency security 2222 they are then responsible for contacting National Grid. **Do not activate the fire alarm.**

**Cryogenic Liquids**
Detailed guidance on the safe handling of Cryogenic Liquids is contained [here](https://www.hse.gov.uk). Very cold materials cause ‘cold burns’ thus it is essential to wear goggles or face shield and appropriate gloves when handling a cryogenic liquid. In a poorly ventilated space the evaporation from liquid nitrogen can **very quickly lead to oxygen deficiency**. In the event of a major spillage, evacuate the room immediately and ventilate the spillage before returning. Do not re-enter, or allow anyone else to do so, until the area is safe.

**VTS Freezer room**
There is a serious risk of freezer burn and [hypothermia](https://www.hse.gov.uk) from working in the VTS freezer store, G11. Thermal gloves jackets and trousers are available and **must** be used whenever working in the store, even for short periods. If work within the freezer is expected to take longer than 10 minutes you must inform a colleague before starting work to check on you at regular intervals. If possible, for prolonged working, work in pairs or turn off the freezer for the duration of the job. DO NOT allow your core body temperature to become too cold. Stay out of the freezer room until your temperature increases back to 37°C.

**Work Equipment**
Work equipment is anything from hand tools such as hammers or knives to laboratory equipment, woodworking machines and mobile equipment e.g. tractors.

The Provision and Use of Work Equipment Regulations (PUWER) 1998 require employers to ensure that equipment provided for use at work should be safe to use and not create any health safety risks, regardless of its age, condition or use. All use of work equipment on University premises therefore requires a “suitable and sufficient” assessment of the risks to health and safety. In cases where the equipment is basic and simple to use, no separate risk assessment will need to be prepared. In these cases, general guidelines can be prepared as part of, for example, local codes of practice.

Hand held tools such as chisels, files etc. should be:
- of good quality;
- in good condition; and
- used for their intended purpose only (e.g. not using a chisel as a hammer).

A [work equipment risk assessment](https://www.hse.gov.uk) should be compiled for all high hazard apparatus machinery e.g. high temperature, pressurised vessels or cutting equipment. These include autoclaves, domestic pressure cookers, centrifuges and band saws. All users of this type of equipment should be given adequate training in its use and there should be a list of authorised users or a training record to verify this. There should also be a record of maintenance of the equipment.
Autoclaves must be examined thoroughly by a Competent Person, normally every 14 months – this is carried out by the University’s Insurer’s Engineers. However, it is important to realise that engineering checks by the Insurer’s Engineer do not normally verify that the correct working temperature is reached and users utilising autoclaves to decontaminate material before disposal must ensure that regular thermocouple checks are carried out.

An independent check should be made of the airflows in microbiological safety cabinets (MSCs) as well as an operator protection factor test (KI discus). Both tests should be carried out annually for MSCs in Containment level 2 (CL2) laboratories, with airflows checked on MSCs in CL3 laboratories on a six-monthly basis (KI test annually).

**Statutory Inspections**

The University’s Insurer’s Engineers examine Lifting Equipment and Pressure Systems including autoclaves and send reports to the Safety Advisers’ Office. Safety Cabinets and Fume Cupboards are examined by an external company. Any of these pieces of equipment found to be operating incorrectly by the Engineers must be taken out of use and remain so until repaired and functioning properly.

**Dangerous Pathogens**

Guidance for the assessment of Dangerous Pathogens and methods of containment can be found in the HSE publications “The management, design and operation of microbiological containment laboratories and Biological Agents – managing the risks in laboratory and healthcare premises” [http://www.hse.gov.uk/biosafety/biologagents.pdf](http://www.hse.gov.uk/biosafety/biologagents.pdf). Information is also available from the University Biological Safety Offices and Advisory Committee on Dangerous Pathogens.

The Safety Advisors Office has produced a CoP covering all aspects of Biological Safety and for information on assessing the risk of working with biological agents.

When transporting infectious substances or other biological material, guidance must be obtained from the document ‘Transport of infectious substances and other biological material.’ Those working with pathogens and GMOs must keep themselves up to date with any new regulations, which will supersede any advice in this document. See ‘latest news’ for details.

**Containment Level 3 Laboratory Leahrus**

The area of the Leahrus Main Building beyond the ground floor fire doors is classed as a CL2 area and is protected by swipe card access. Within this area is a CL3 dedicated laboratory with restricted access and an intruder alarm. As potentially dangerous pathogens as in use in the CL3 area all staff and students must be fully trained before they will be allowed access to the facility. Application forms and CL3 codes of practice can be obtained from Jan Brett (ext. 56060, m. 6623). All workers must read and adhere to the CL3 Code of Practice. A list of authorised users is displayed in the ante-room. All work with CL3 biological agents must be risk assessed using the form provided by the University Safety Adviser’s Office here. Risk Assessments are then to be submitted to the University Bio-Hazards Sub-Committee via the University Biological Safety Adviser for approval before work begins.

**Human Tissue Act**

The Human Tissue Act 2004 (HT Act) is the legislative framework in England, Wales and Northern Ireland which governs the removal, storage, use and disposal of ‘relevant human material’ from the living and the deceased for ‘scheduled purposes’. Substances and samples which are composed mostly or partly of human cells, will usually be covered by the HT Act (including skin, bone, blood, organs and tissue.). Excretions and secretions are usually covered including sputum, urine and faecal matter. Relevant material does not include hair or nails from living people, embryos outside the human body or any material which contains only cells created outside the human body; for example, cell lines.
If you plan to carry out any research with human material, you must have the appropriate approvals in place before you start your research. You must contact our site Human materials officer (HMO) Professor Nicola Williams, or Jan Brett in her absence Deputy HMO if you wish to store any human material. All researchers are responsible for:

- obtaining appropriate ethical approval to use the human material
- providing annual returns detailing the samples held on University premises to the Human Tissue Act Designated Individual upon request

An overview of the HT Act including training available is available here. Further information can also be found on the Human Tissue Authority (HTA) website.

**Genetic Manipulation of Organisms**

An overview of the safety and legal issues around work with GM organisms can be found at here. Proposed experiments involving genetic manipulation must first be submitted to and approved by the Biosafety Committee and staff working in containment laboratories will be restricted to those approved by the Biosafety committee. A list of all those working in the containment laboratories must be kept by the Biological Safety Officer, and is included in each individual risk assessment.

Forms for GM risk assessments and notification can be found here. The Local Code of Practice for Experiments involving Genetic Manipulation is available from the Safety Notice boards and the safety supervisors. New workers must familiarise themselves with the School’s Safety Code of Practice, the Local COP for genetic manipulation and appropriate HSE notes.

**Waste**

**Disposal of Hazardous Waste**

Waste solvents should be collected and retained in labelled plastic cans - green 5 litre containers for halogenated solvents and red 10 litre containers for non-halogenated solvents. When full, collection for these containers should be arranged. At Leahurst, the collection point is the solvent store at the back of the Main Building. Some chemicals are harmless and these may be disposed of by including them with general waste, or by dissolving into water and flushing to drain. Please check chemical data sheet for detailed instructions for disposal of chemical.

Other hazardous chemicals must be consigned to the University’s waste chemical disposal service. A list detailing the chemical name, location, packaging, physical state, associated hazards and precautions and quantity of each chemical for disposal must be sent to the Safety supervisor who will then inform the University Safety Officer. The chemicals should be placed in labeled boxes and consigned to the waste chemical store until collection can be arranged. Please order only the amount of chemical you need as there is a charge for disposing of excess chemicals. Larger pack sizes become more expensive when you add in the disposal cost.

**Disposal of Clinical waste**

Potentially infected waste from clinical/farm areas, research laboratories and post-mortem rooms (gloves, soiled swabs and dressings etc.), must be disposed in strong yellow bags (with a UN 3291 certification). Animal carcasses, viscera and large pieces of tissue (Identifiable as coming from animal carcasses) from treatment areas should be disposed of in yellow bins with red topped lids. These must be placed in the large red tagged 770L wheelie bins in the outside chiller unit near the rear of the small PM room. Chemically contaminated waste (e.g. tissue culture plastics, molecular biological waste etc.) from research laboratories should also be placed in the yellow waste bags. However, GM and containment level 3 wastes must be autoclaved before entering the yellow waste stream using light blue autoclave bags, or transparent bags with light blue inscription. Domestic waste from laboratories such as paper towels, wrappings etc. should go into clear bags in separate grey domestic waste bins.
Contaminated needles, cartridges, disposable sharp instruments, broken microscope slides etc. must be placed in designated sharps containers with a yellow lid. When ¾ full these must be properly sealed and placed directly into dedicated large yellow carts. Needles should never be re-sheathed prior to disposal (unless a safe system of work has been prepared and documented). Tips and pipettes etc. used in laboratories should be disposed of in bio-bins to prevent them puncturing the yellow bags.

Waste pharmaceuticals and empty drug containers should also be disposed of in large yellow bins with a blue lid. Cytotoxic waste such as chemotherapeutic drugs and ethidium bromide, must be disposed of using purple lidded bins or purple bags. Blue pharmaceutical waste and purple cytotoxic waste will be collected in separate waste streams. All waste bags/bins must be tied securely and labeled with location, initials and date (so in the event of an emergency they can be traced back to area they were produced) then placed in a dedicated yellow cart for collection by external contractors. Each cart must be labelled with appropriate tag and records kept of waste collection. The large yellow carts must not be overfilled, nor must any carcass or other waste material be left on the floor in the vicinity of any of the bins.

All sharps/bio-bins should be labeled with date, initials and location, when they are set up and then disposed of within 3 months in a separate yellow cart.

Broken or surplus glassware should be placed in covered metal drums in individual laboratories and when half full, staff from that laboratory should make their own arrangements for emptying to the outside bulk bins. Alternatively, broken glass may be stored in cardboard boxes prior to disposal. Wear eye protection when disposing of glassware. Procedures for the disposal of radioactive materials in registered Departments are contained in the Local Rules, which give details of the disposal routes and of permissible activities.

Domestic, non-hazardous waste
As part of its green policy the University collects domestic non-hazardous waste via clear plastic bags in grey bins. Cardboard is collected in a separate shed for recycling. Confidential waste is collected into separate ‘confidential shredding bags’ (available from the Main Building reception) and stored in secured bins until collection by an external company operating through the University. For confidential waste collection please contact Ruth Harvey on 46003.

Recycling
Facilities Management provides a service for hazardous waste removal and recycling from departments within the University. There is a charge for the removal of certain items and this will be advised on contact. Fridges and freezers, computer screens, electrical and electronic components, light bulbs and fittings and batteries can be collected by Facilities Services after completion of the on-line form: http://www.liv.ac.uk/facilities-management/services/recycling-collections/_. In a move towards sending zero waste to landfill, the University of Liverpool has introduced a recycling scheme, which sees the removal of desk-side waste bins and installation of dedicated recycling stations situated throughout buildings. Recycling stations, with separate bins for recycling paper, food & drink cans, plastic bottles, and for the disposal of general non-recyclable waste, have been installed throughout the campus with aim of ensuring the maximum amount of material is recycled.

Confidential Waste
Confidential waste is collected into separate ‘confidential shredding bags’ (available from the Main Building reception) and stored in secured bins until collection by an external company operating through the University. For confidential waste collection please contact Ruth Harvey on 46003.
University Information and Documentation
The University Safety Advisors Office publishes safety literature on its webpage. Codes of Practice available on the University's web pages include:

- Acrylamide
- Animal Allergens
- Asbestos
- Carcinogens, Mutagens and Substances Toxic to Reproduction (STRs)
- Confined Spaces
- COSHH
- Drug Precursor Chemicals
- Fieldwork
- Fire Safety
- Hazardous and Unusual Activities
- Hazardous Waste
- Legionella
- Lone Working
- Means of Escape for Disabled Persons
- Minibuses
- Personal Protective Equipment
- Responsibilities of Supervisors towards postgraduate/undergraduate students
- Safe Use of Working Equipment
- Smoking
- Stress
- Working with Animals
- Workshop safety

Guidance on biological hazards (including immunisation) can be found on the University’s Biosafety pages. UCEA codes of practice on the following are also available:

- Fieldwork safety
- Leading Health and Safety at Work
- Placement of students
- Working overseas

In addition the following relevant overviews are available here:

- using hazardous substances (COSHH);
- using display screen equipment;
- using electrical equipment;
- controlling the risks from fire;
- carrying out manual handling tasks;
- using personal protective equipment;
- handling sharps;
- controlling slips, trips and falls;
- using work equipment and the working environment
- using laptops

Other safety information such as University Safety Circulars will be displayed on the Safety Notice Boards as they are published and on the SAO intranet page.
Appendix 1

SAFETY & BIOSECURITY IN THE SCHOOL OF VETERINARY SCIENCE

This is to confirm that I have read, understood and agree to abide by those sections of the Veterinary Science Safety and Biosecurity Code appropriate to my duties (as indicated below).

Signed:_______________________________________________________

Name (Please print):_____________________________________________

Line Manager:___________________________________________________

Department/Group:______________________________________________

Line Manager/Supervisor (if applicable):_____________________________

Date:___________________________________________________________

University of Liverpool staff/staff/student/visitor* (Please delete as appropriate)

Please tick:

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Safety supervisor:________________________________________ Date:____________

Name (Please print):__________________________________________