Shape

Description automatically generated with medium confidence

**HEALTH & SAFETY**

**Laboratory Checklist**

|  |  |
| --- | --- |
| **Name of School/Service** |  |
| **Location** |  |
| **Name of Assessor** |  |
| **Date** |  |

**Guidance Notes**

This checklist is provided by the Health and Safety Team as a template, which provides a basic framework for the conduct of a School/Service self-inspection of the type of environment indicated. It will normally require to be amended and/or expanded to address fully the specific requirements of the area inspected and therefore should not be regarded as exhaustive.

In the Health and Safety [Policy Statement](http://staff.napier.ac.uk/services/governance-compliance/healthandsafety/policies/Pages/Statement-of-General-Health-and-Safety-Policy.aspx), the University undertakes not only to set up suitable provisions to ensure, so far as is reasonably practicable, the health and safety of all University employees, students and others visiting or entering the University, but also to monitor the effectiveness of these provisions.

For any given Dean of School/Director of Service to be confident that their School/Service declared policy with respect to health and safety is being observed at the workplace, some system of checking performance to assess the success in implementing the stated policy must be carried out.

Each Dean of School/Director of Service is required to report annually to the University regarding this, and other aspects of the management of health and safety within their area of control. This is carried out using the annual health and safety report issued by the Health and Safety Office.

The attached checklist is there to assist in regular self-inspection to highlight areas of deficiency, to document these findings and to set in train the remedial action felt to be necessary.

Persons appointed to carry out the self-inspection should normally be chosen from members of the School/Service staff; often the School/Service Safety Co-ordinator will perform this task. Specialist knowledge can be sought from specialists within the School/Service and assistance and advice is always available from the Health & Safety Team.

In order to assist the person(s) carrying out School/Service safety self-inspections, the following model checklist of points to be looked at has been formulated, which covers most general health and safety items relevant to high risk areas. The model checklist should be tailored to an individual School’s/Service’s requirements by adding reference to any particular hazards which are presented by specific School/Service activities.

**Section A : Administrative Procedures**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Yes** | **No** | **N/A** |
| 1 | Have copies of the School/Service Safety Policy/Code/Rules been made available to all staff or available in each Laboratory? |  |  |  |
| **2** | **Are all persons working in the area familiar with the requirements of the COSHH Regulations with respect to the assessment of risks associated with work involving hazardous substances and biological agents?** |  |  |  |
| **3** | **Are copies of Risk and COSHH Assessments regarding the experiments/projects/research undertaken in the Laboratories available for inspection by relevant Health and Safety Authorities?** |  |  |  |
| **4** | **Are copies of the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) assessments available?** |  |  |  |
| **5** | **Have actions been completed on DSEAR assessments?** |  |  |  |
| **6** | **Has a review of the DSEAR assessments been carried out in the last 12 months?** |  |  |  |
| **7** | **Have levels of instruction, training and supervision been effectively matched to the skills and experience levels of the individuals and supervisors working in this area?** |  |  |  |
| **8** | **Are electronic records kept on HR Connect to document the training, both internally and externally, received by staff?** |  |  |  |
| 9 | Has a School/Service Safety Committee been formed to monitor/advise on relevant safety issues? |  |  |  |
| 10 | Does the School/Service Safety Committee meet as a minimum 3 times per year? |  |  |  |
| 11 | Is there a system in place to control apparatus and/or experiments running overnight and/or at weekends? |  |  |  |
| 12 | Has a School/Service Safety Co-ordinator been appointed ? |  |  |  |
| 13 | Has a procedure been developed for ‘Lone Working’ in School/Service Laboratory areas? |  |  |  |
| 14 | Are procedures for the reporting of accidents, incidents and occupational ill health established and made known to staff and students? |  |  |  |

**Section B : General Laboratory Area**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Yes | No | N/A |
| 1 | Are floors clean and dry? |  |  |  |
| 2 | Are floor coverings non-slip? |  |  |  |
| 3 | Are floor coverings intact? |  |  |  |
| 4 | Are worktops intact and easily cleaned? |  |  |  |
| 5 | Is lighting adequate and in working order? |  |  |  |
| 6 | Is the standard of general room ventilation satisfactory for the type of work undertaken? |  |  |  |

**Section C : Laboratory Housekeeping and Storage of Hazardous Materials**

|  |  | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
| 1 | Are passageways clear of tripping hazards e.g. cables, stock, rubbish, etc.? |  |  |  |
| 2 | Are rubbish receptacles emptied regularly? |  |  |  |
| 3 | **Are glass bottles/Winchesters stored where they cannot be knocked or kicked over?** |  |  |  |
| 4 | **Are properly designated carriers available for the transportation of bottles?** |  |  |  |
| 5 | **Are heavy items stored on/in low shelves or cupboards?** |  |  |  |
| 6 | **Are all chemicals clearly labelled and stored, including hazard symbols where appropriate? (**[Hazardous](http://staff.napier.ac.uk/services/governance-compliance/healthandsafety/policies/Pages/Policies-A-Z.aspx) Substances Policy**)** |  |  |  |
| 7 | Are flammable reagents and solvents etc. stored in suitable closed vessels within fire resistant cupboards, cabinets or bins containing spill trays? |  |  |  |
| 8 | Are these flammable stores properly labelled in accordance with the Health and Safety (Signs and Signals) Regulations? |  |  |  |
| 9 | Are very toxic chemicals kept in locked storage? |  |  |  |
| 10 | Are bottles containing strong acids or strong alkalis stored on spill trays? |  |  |  |
| 11 | Are there purpose made, properly labelled receptacles for sharps disposal? |  |  |  |
| 12 | Is waste that is of clinical origin or is a biohazard disposed of in sealed yellow bags for incineration? |  |  |  |
| 13 | Are materials sent out as per Shipping Regulations? |  |  |  |
| 14 | Are storage areas e.g. rooms, cupboards, refrigerators, freezers, etc., where potentially infective and/or toxic materials are kept, labelled accordingly? |  |  |  |
| 15 | If hazardous micro-organisms are present in the laboratory, is the door labelled with the international biohazard sign? |  |  |  |

**Section D : Plant and Equipment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Yes** | **No** | **N/A** |
| 1 | **Has all portable electrical equipment been tested and labelled with the date of test, in accordance with the Electricity at Work Regulations and the university PAT testing requirements?** |  |  |  |
| 2 | **Is the use of electrophoresis equipment covered by a safe system of work?** |  |  |  |
| 3 | **Are the power supply leads to electrophoresis equipment shrouded?** |  |  |  |
| 4 | **Do all centrifuges have interlocked lids?** |  |  |  |
| 5 | **If not, is a suitable warning sign affixed to the centrifuge lid?** |  |  |  |
| 6 | **Have all pressure vessels (including pressurised liquid nitrogen dewars) been notified to the University’s Insurance Surveyor for regular inspection and test in compliance with the Pressure Systems Regulations?** |  |  |  |
| 7 | **Is the safety working pressure (SWP) clearly marked on all pressure vessels?** |  |  |  |
| 8 | **Are all pressurised gas cylinders secured by restraining chains, bench clamps or similar?** |  |  |  |
| 9 | **Have quantities of pressurised gas cylinders been kept to a minimum in the labs?** |  |  |  |
| 10 | **Are excess cylinders stored in the appropriate storage facility outside the university building?** |  |  |  |
| 11 | Are gas cylinders sited away from doors or escape routes? |  |  |  |
| 12 | Are there properly designed gas cylinder trolleys for their transportation? |  |  |  |

**Section E : Safe Systems of Work**

|  |  | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
| 1 | **Have suitable and sufficient Risk Assessments been made of any activity carried out in this area which is liable to expose employees to any substance hazardous to health, in accordance with the requirements of the Control of Substances Hazardous to Health Regulations?** |  |  |  |
| 2 | **Are records of assessments kept and readily accessible to those working with the substances?** |  |  |  |
| 3 | **Have employees been informed of the results of assessments and of any required safe system of work?** |  |  |  |
| 4 | **Where risks have been identified, have suitable and sufficient control methods been put in place to prevent exposure or to reduce exposure to the lowest level reasonably practicable?** |  |  |  |
| 5 | **Where Occupational Exposure Limits are assigned to a substance, is exposure controlled below that limit?** |  |  |  |
| 6 | **Where required is access to the area restricted to authorised persons only?** |  |  |  |
| 7 | **Based on the materials being used in the lab, is there a requirement to carry out occupational health surveillance?** |  |  |  |
| 8 | Has a laboratory or laboratory site been designated a containment area for pathogen and/or generic modification work? |  |  |  |
| 9 | Have Material Data Sheets been acquired for all hazardous substances supplied by a manufacturer, wholesaler or retailer, for use in this area? |  |  |  |
| 10 | Have all chemicals/gases, hazardous materials etc. been included on the University electronic Hazardous Database and kept up to date? |  |  |  |
| 11 | Have all necessary people access to the Hazardous Database? |  |  |  |
| 12 | Has the Hazardous Database been audited by the department in the last 12 months to ensure accuracy of the information? |  |  |  |
| 13 | Are safe systems of work in place for maintenance and cleaning of laboratories by non-laboratory personnel and maintenance contractors? |  |  |  |

**Section F : Engineering Control**

|  |  | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
| 1 | Where fume cupboards are used to control exposure to hazardous substances, are they labelled as having been inspected and tested within the past 14 calendar months? |  |  |  |
| 2 | Where fume cupboards are used to control exposure to hazardous substances, are automatic stops fitted to the sash on the cupboard(s) in this area? |  |  |  |
| 3 | If no, have arrowed labels been affixed to indicate the safe working height? |  |  |  |
| **4** | **Where local exhaust ventilation is owned by departments (e.g. recirculatory fume hoods), are they subject to a regular service and test by competent engineers, at least every 14 calendar months?** |  |  |  |
| **5** | **Where other forms of local exhaust ventilation, e.g. bench capture hood, are used to control exposure to hazardous substances, are they subject to inspection and test at least every 14 calendar months?** |  |  |  |
| **6** | **Where microbiological safety cabinets are used to control exposure to biological agents, are they subject to containment and filter penetration tests at appropriate intervals?** |  |  |  |
| **7** | **Where microbiological safety cabinets are used to control exposure to biological agents, is a valid operator protection test certificate available for each cabinet in this area?** |  |  |  |

**Section G : Personal Protective Equipment (PPE)**

|  |  | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
| 1 | Is PPE e.g. overalls, eye protection, gloves, respirators etc. positively assessed as relevant to the hazard and identified in the COSHH Assessment provided? |  |  |  |
| 2 | If it is not ‘one shift’ disposable, is the PPE regularly inspected, cleaned and maintained? |  |  |  |
| 3 | In the case of respiratory or hearing protection is it personal to an individual? |  |  |  |
| 4 | Is eye protection mandatory for any work activity which presents a potential hazard to the eyes? |  |  |  |
| 5 | If so, are Eye Protection Zones clearly highlighted with mandatory safety signs? |  |  |  |
| 6 | Is the protective equipment stored where it cannot be contaminated by hazardous substances and where it will not contaminate outdoor clothing? |  |  |  |
| 7 | Have all items of PPE been risk assessed to ensure they are compatible when used together? |  |  |  |
| 8 | Are there sufficient stock of protective equipment, especially respiratory, so as to allow replacement if a defect is found? |  |  |  |
| 9 | In the case of PPE which may be contaminated by biological agents, is it always removed on leaving the work area? |  |  |  |
| 10 | In the case of PPE which may be contaminated by biological agents, is it always kept apart from uncontaminated clothing or equipment? |  |  |  |
| **11** | **Are there suitable arrangements in place for the cleaning and/or decontaminating of protective clothing?** |  |  |  |

**Section H : Emergency Procedures**

|  |  | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
| 1 | **Is there a person, with experience and knowledge, designated to deal with spills/leaks involving very hazardous substances?** |  |  |  |
| 2 | **Are there appropriate spill kits available to deal with spills/leaks of hazardous substances?** |  |  |  |
| 3 | **Is suitable PPE, especially respiratory, available to protect laboratory and/or maintenance personnel in the event of control measures failing or to deal with a spillage?** |  |  |  |
| 4 | **Have plans been drawn up to deal with accidents?** |  |  |  |
| **5** | **In the case of biological agents do the plans specify appropriate decontamination and disinfecting procedures?** |  |  |  |
| **6** | **In the case of biological agents and/or risk of serious chemical contamination, are shower facilities available?** |  |  |  |
| **7** | **If eye wash stations are provided, are they of the type connected to the buildings water supply?** |  |  |  |
| **8** | **If not, are there sufficient supplies of eye cleaning wash?** |  |  |  |
| **9** | **Have the eye wash stations been regularly cleaned and checked for operation?** |  |  |  |
| **10** | **Is there a first aid box readily available?** |  |  |  |
| **11** | **Is there a trained first aider available within the School/Service?** |  |  |  |
| **12** | **Are there sufficient first aid notices (green on white) informing staff of how and where to gain first aid help?** |  |  |  |
| **13** | **Is there relevant firefighting equipment readily available, e.g. fire extinguisher?** |  |  |  |
| **14** | **Are personnel working in this area familiar with the location of this equipment?** |  |  |  |
| **15** | **Are personnel aware of the nearest fire exit route and nearest fire assembly point?** |  |  |  |
| **16** | **Are there sufficient Fire Action Notices (white on blue) to inform personnel of the action to take in the event of fire?** |  |  |  |
| **17** | **Has each member of staff or postgraduate student been given access to a copy of the fire routine procedure (blue on white)?** |  |  |  |
| **18** | **Has a Fire Warden been appointed to cover this area?** |  |  |  |
| **19** | **Do staff know how to contact the emergency services?** |  |  |  |
| **20** | **If a spillage occurs is information available on how to clean it up correctly?** |  |  |  |
| **21** | **Have all hazardous spills been reported and procedures revised to prevent further spillages?** |  |  |  |

**Section I : Hygiene Control**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Yes** | **No** | **N/A** |
| 1 | **Are there adequate washing facilities, with soap and towels?** |  |  |  |
| 2 | **Is eating, drinking, smoking and the application of cosmetics banned in laboratory areas?** |  |  |  |
| 3 | **Is there any evidence of eating, drinking or smoking (including vaping) in the laboratory areas?** |  |  |  |
| 4 | **Is there provision for the secure storage of outdoor clothing out with this area, or in secure cupboards/lockers within the area as appropriate to prevent contamination?** |  |  |  |
| **5** | **Are there welfare facilities available out with this area where personnel can eat and/or drink?** |  |  |  |
| **6** | **Do these facilities include an adequate supply of wholesome drinking water for drinking or filling kettles, etc.?** |  |  |  |

**Section J : Manual Handling**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Yes** | **No** | **N/A** |
| 1 | **Has a Risk Assessment been carried out for any task which requires the transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving) by hand or bodily force in accordance with the Manual Handling Operations Regulations?** |  |  |  |
| 2 | **Where the findings of the assessment are significant, i.e. anything other than a low risk injury, has the assessment been recorded?** |  |  |  |
| 3 | **Where there is a significant risk, have steps been taken to avoid the need for manual handling, or where this is not practicable, to reduce the risk to the lowest level reasonably practicable, by either altering work practices to introducing mechanical aids?** |  |  |  |

**Section K : Occupational Health**

|  |  | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
| 1 | **Where there is a potential exposure to highly toxic substances being used by staff on a routine basis, has a health surveillance programme been implemented?** |  |  |  |
| 2 | **Are areas where toxic substances are used regularly routinely atmospherically tested?** |  |  |  |
| 3 | **Is there a policy for new and expectant mothers with regard to laboratory work within the School/Service and are risk assessments carried out?** |  |  |  |
| 4 | **Does the School/Service have a defined purchase policy for the procurement of toxic and highly toxic substances? (**[Hazardous Substances Policy](https://staff.napier.ac.uk/services/governance-compliance/healthandsafety/policies/Pages/Policies-A-Z.aspx)**)** |  |  |  |
| **5** | **Is there a suitable cleansing station in place?** |  |  |  |