

**Brearley Hall School**

Science Department

Health and Safety Policy

Policy written March 2021

Reviewed on 31st August 2023

Next review date August 2024 or sooner if required.

Signed



James Docherty  
Head of Education

# Health & Safety Policy for Science Departments

March 2021

## CONTENTS

Page

Introduction .....	<b>Error! Bookmark not defined.</b>
Instructions for using this model policy.....	<b>Error! Bookmark not defined.</b>
Summary guidelines for staff.....	3
1. The role of this policy.....	4
2. General aims .....	4
3. Health and safety roles .....	4
4. Training.....	5
5. Risk assessments.....	6
6. Equipment and resources.....	7
7. Activities and procedures.....	8
8. Emergency procedures.....	9
9. Laboratory rules for students .....	12
10. Staff roles and emergency contacts.....	11

## HEALTH & SAFETY POLICY for SCIENCE DEPARTMENTS

### Summary guidelines for staff

#### All teachers, technicians and support staff

1. Teachers and technicians have a general duty to take reasonable care for the health and safety of themselves, of other members of staff and of pupils. They have specific duties: to be familiar with this health and safety policy, its updates, the texts to which it refers and any Appendices. They must cooperate with the employer's instructions, observe the requirements of this policy and fulfil any special responsibilities it gives them. They must cooperate with colleagues in their specific health & safety duties. They have a duty to report to local management any failure of equipment that has a health & safety function.
2. Staff practice must set a good example to pupils and be consistent with pupil laboratory rules, eg, over the wearing of eye protection.
3. Staff must be familiar with emergency drills and with the location in each science room of the escape route; fire-fighting equipment; the eye wash station; the main gas cock; the main electricity switch and the nearest spill kit.
4. Laboratories must be left safe. Special arrangements must be made for equipment which has to be left running overnight and hazardous equipment which must be left out. In general, all gas taps should be completely turned off and all mains-operated apparatus switched off. [At the end of the day, if practicable, gas should also be turned off at the laboratory main gas cock and electricity at the laboratory main switch.]
5. Eating, drinking and the application of cosmetics must not take place in laboratories, storage areas or preparation rooms. Pupils must not be allowed to drink from water bottles.
6. When staff are alone in the science department, nothing should be done which could lead to an accident requiring remedial measures. A teacher or technician must assess risks very carefully before conducting any practical operation in such circumstances.
7. In general, pupils must not be left unsupervised in a laboratory. Staff needing to leave a class briefly must assess the risks of doing so, arrange for temporary supervision by a neighbouring member of staff. Special arrangements may be needed for senior students doing project work, depending on the hazards involved, eg, an experienced member of staff in an adjacent room.
8. Science laboratories, preparation rooms and stores must be locked by staff when not in use. Pupils must never be allowed into preparation rooms. Laboratories must only be used by teachers who are not scientists for teaching or registration after they have received special training. Laboratories must be available for teacher-supervised club activities only by special arrangement.

#### Teachers

1. At the beginning of each school year, teachers must make sure that their classes have copies of the student laboratory rules [see section 10] and issue them if necessary. They should be stuck into an exercise book, work folder or similar place.
2. Teachers must enforce the student laboratory rules, reminding students of them often enough for them to be familiar. With new students, time should be spent explaining the rules, with appropriate demonstrations.
3. Lesson preparation should be adequate and include checking on risk assessments and, where necessary, the health & safety precautions required. Requisitions must not be handed in at the last minute; technicians must be given adequate time to prepare work safely. Time should be allowed for consulting more-senior colleagues where there is any doubt and to try out practical is, particularly those involving significant hazards. Teachers must only deviate from the scheme of work (for which the activities have been checked against model risk assessments), after considering a further risk assessment, checking with a subject specialist, possibly obtaining a special risk assessment from CLEAPSS. Teachers should explain precautions to students as part of their health & safety education.
4. Open-ended investigations must be organised to allow the teacher to assess any risks and identify precautions before any hazards are met / practical work begins.
5. If, because of unacceptable behaviour, health and safety cannot be maintained during certain practical work, the work should be modified or abandoned. This decision should be reported to the Science Lead.
6. A teacher is responsible for the health and safety of any of his/her classes taken by a trainee teacher. If the normal class teacher is absent, another science teacher must be given this responsibility by the Lead Teacher.
7. Teachers in charge of courses are responsible for ensuring that technicians are familiar with the appropriate precautions needed to control any hazards which might be encountered in preparing equipment for their lessons and in clearing the equipment away. Class teachers may need to remind technicians of such warnings.

**Brearley Hall School**  
**SCIENCE DEPARTMENT HEALTH & SAFETY POLICY**  
**[March 2021]**

## **1. The role of this policy**

This *Science Department Health & Safety Policy* should be read in conjunction with the employer's general Health & Safety Policy and where separate the detailed arrangements for implementing that policy in this school. The purpose of this document is to record the arrangements made in the science department to implement the policy in accordance with the *Code of Practice or Guidance* issued by the employer.

This document is maintained by the science department. It is copied to all new members of staff, ie, teachers, technicians, trainees, etc working in the department. Staff are expected to sign the list kept in science laboratory to show that they have received a copy. A reference copy, together with various Appendices, is kept in reception area available for consultation by staff and for inspection by visiting HSE inspectors or a representative of the employer. A copy of this document has been lodged at head office.

This document recognises the right of any or every trade union in the workplace to elect health & safety representatives for its members and its right to require a health & safety committee to be set up in the school. The science department will cooperate with any union health & safety representative to promote health, safety and welfare and will address any matters raised by or through such a representative in a manner appropriate to the level of risk.

## **2. General aims**

Science teaching has an excellent health & safety record, and this department is keen to promote practical work as an essential component of good science teaching. It is determined that spurious concerns about health and safety should not be allowed to inhibit good teaching. However, it is the duty of all members of the science staff, ie, teachers and staff who work in the department, technicians, teaching assistants and other support staff (eg, special needs and bilingual staff) and trainees:

- to take reasonable care for the health and safety of themselves and other persons who may be affected by their acts or omissions during work;
- to be familiar with this health & safety policy by periodic reference to it
- to look out for any revisions;
- to follow its provisions, and
- to cooperate with other members of staff in promoting health and safety.

## **3. Health and safety roles**

### **3.1 Duties, Functions and tasks**

The Proprietor, Dominic Macauley, has the ultimate duty to ensure the health and safety of employees and others on the site and hence in this department.

This Proprietor has not currently issued any local instructions specific to science. The staff *Code of conduct policy* is available to view.

The task of overseeing health and safety on this site has been delegated by the employer to, James Docherty Head Teacher, Simon Murtagh Lead Teacher Wayne Traynor Health and Safety Officer. Within the science department, this task is further delegated to the Science Lead who has the function of maintaining this policy document. See section 10 for the names of the staff members currently with specific H&S functions.

The next major review of this policy will take place before 17<sup>th</sup> March 2022

### 3.2 Communications

Communication of health & safety information is of the greatest importance and is the task of the Science Lead with the assistance of Lead Teacher and those in charge of science suites Jolene Burns. In this department, all staff are issued with this policy. A reference copy is kept in the Science Laboratory and main Office together with any appendices.

Any new instructions, restrictions or rescinded (lifted) restrictions made by the employer are communicated to all staff in writing as well as being attached to the reference copy of this policy.

### 3.3 Monitoring and checking

The employer expects the science department to monitor the implementation of this policy and the employer's *Code of Practice for Science*. Records of monitoring are kept by the Science Lead.

The timetable for Checklists on resources and facilities for daily/weekly/termly/annual use by Science staff is kept with the reference copy of this policy. Records of the checks are kept by the Science Lead in the *Safety Check File*.

## 4. Training

The person with the task of seeing that training is provided is the Science Lead.

Generally, this department follows guidance in the CLEAPSS documents G238, *Health and Safety Induction and Training of Science Teachers* and L234, *Induction and Training of Science Technicians*, customised, to identify the training needs of staff.

Training functions are delegated as follows (to be read in conjunction with section 10).

Health & safety aspects of the work of newly-qualified teachers and other new teachers	The Science Lead
Health and safety of trainees on teaching practice	The Science Lead
Induction of newly-appointed technicians	The Head of Education and Lead Teacher
Immediate remedial measures and other emergency procedures (spills, bench fires, etc)	The Science Lead
Training in the use of specialist equipment, chemicals or procedures (in line with CLEAPSS guides G238 and L234, as customised)	The Science Lead
Health & safety training of non-science support staff	The Science Lead
[Health and safety of non-science teachers using laboratories]	The Science Lead
Manual handling for all staff using laboratories	The Science health & safety officer
Healthy and safe procedures for laboratory cleaners	The Science Lead
Regular update training (covering new or changed regulations, new equipment etc)	The Science Lead

Records of the training received by members of the science staff are kept in the *Safety Check File*.

## 5. Risk assessments

Every employer is required under various regulations<sup>1</sup> to supply employees with a risk assessment before any hazardous activity takes place. (Common hazardous activities carried out in science departments are listed in the publications below.) Because it is impracticable for the employer to write risk assessments for each of the many activities in school science, this employer follows the recommendation of the Health and Safety Commission to adopt published 'model' or 'general' risk assessments which school science departments adapt to their local circumstances.

The employer has instructed that the following publications are to be used as sources of model general/risk assessments.

CLEAPSS, *Hazcards*, current edition

CLEAPSS, *Laboratory Handbook*, current edition

CLEAPSS, *Recipe Book*, current edition

CLEAPSS, L93, *Managing Ionising Radiations and Radioactive Substances*

Where there is further risk to individual pupils this will be reflected in a personal risk assessment being carried out.

Whenever a new course is adopted or developed, all activities (including preparation and clearing-up work) are checked against the model risk assessments and significant findings are incorporated into texts in daily use, ie, the scheme of work. See section 10 for the member of staff with the task of overseeing this process<sup>3</sup>.

If a model risk assessment for a particular operation involving hazards cannot be found in these texts, a special risk assessment is obtained, following the employer's instructions, from CLEAPSS. To assess the risks adequately, the following information is collected.

- Details of the proposed activity.
- The age and ability of the persons likely to do it.
- Details of the room to be used, ie, size, availability of services and whether the ventilation rate is good or poor.
- Any substance(s) possibly hazardous to health.
- The quantities of substances hazardous to health likely to be used, including the concentrations of any solutions.
- Class size.
- Any other relevant details, eg, high voltages, heavy masses, etc.

**Once the scheme of work has been checked against the model risk assessments, staff should deviate from it only if their proposed activities have been also checked with the models and agreed with the Science Lead.**

**We encourage the development of new practical activities (including on open evenings, at science clubs, etc) but these should be undertaken only after a prior check against model risk assessments and/or a special risk assessment has been obtained.**

Where an activity must be restricted to those with special training, that restriction is included in a note on the text.

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<sup>1</sup> Risk assessments are required by the *Control of Substances Hazardous to Health (COSHH) Regulations*, the *Management of Health & Safety at Work Regulations*, the *Dangerous Substances and Explosive Atmospheres Regulations (DSEAR)* and many others.

<sup>3</sup> See CLEAPSS guide L196, *Managing Risk Assessment in Science* and the guidance leaflet GL90 *Making and recording risk assessments in school science*.

## **6 Equipment and resources**

### **6.1 Fume cupboards N/A**

### **6.2 Electrical testing**

To meet the requirements of the *Electricity at Work Regulations*, this employer requires portable electrical equipment to be inspected and tested regularly. The Health and Safety Officer has the function of seeing that this happens within the science department. Testing takes place each year.

This employer has arranged a contract with JRS Electrical Solutions who must be allowed access to carry out the work. This work will be carried out by the trained technician using a proper earth-bonding and insulation test set, following procedures in the *CLEAPSS Laboratory Handbook* Section 6.

Completed schedules are kept in the *Safety Check File*. A copy is also kept in reception and are available for staff reference and for inspection by the employer's representative or an HSE Inspector. See section 10 for the names of the staff members currently with these functions.

All users have been trained to carry out a quick visual inspection before using mains-powered equipment.

### **6.3 Radioactive sources N/A**

### **6.4 Pressure vessels N/A**

### **6.5 Animals, plants and microorganisms in schools**

The hazards associated with the use of animals, plants and microorganisms are discussed in the texts listed in section 5 which also give advice on controlling them. This advice will be followed, and any queries referred to the subject specialist for biology (see section 10).

### **6.6 Equipment safety**

All staff selecting equipment for purchase will check that it is safe and suitable for the intended purpose to comply with the *Provision and Use of Work Equipment Regulations*. Equipment listed by specialist educational equipment suppliers is taken to meet these *Regulations* but all other equipment, especially gifts, is treated with caution and carefully assessed. Advice on safety and suitability is sought from CLEAPSS/ the local authority through publications and directly.

Equipment restricted to those users who have received special training (see section 4, *Training*) is [listed here] / [labelled accordingly] / [given warnings in texts in daily use].

Any user who discovers a hazardous defect in an item of equipment must report it to the Science Lead.

### **6.7 Personal protective equipment**

The employer accepts the duty to provide eye protection, gloves and laboratory coats for employees where the risk assessment requires them (*Personal Protective Equipment at Work Regulations*).

The employer expects eye protection to be available for students and visitors. Safety spectacles are provided for general use, with a set of goggles or face shields used whenever the risk assessment requires them./ Goggles or face shields to chemical-splash standard are worn whenever there is a risk to the eyes.

The condition of the eye protection is checked regularly (see section 3.3, *Monitoring and checking*).

### **6.8 Chemicals**

Offers of gifts of chemicals are not accepted to ensure that stocks are not increased unduly and that no unwanted chemicals are included.

The task of arranging safe storage of chemicals (and, where necessary, disposal), including highly-flammable liquids, in accordance with the requirements of the *Dangerous Substances and Explosive*

*Atmospheres Regulations (DSEAR)* is given to the Science Lead who will ensure that chemicals are stored securely, the risks of fire, explosion and spillage are minimised, labels are readable and that a spill kit is available and properly replenished.

See section 10 for the name of the staff member currently with this function.

Hazardous activities involving chemicals restricted to those who have received special training (see section 4, *Training*) are identified in the texts in daily use as part of the risk assessment (see section 5, *Risk assessments*).

## **6.9 Waste disposal**

Waste chemicals and equipment are disposed of in an environmentally-responsible manner in accordance with relevant legislation. Chemical disposal follows guidance on CLEAPSS *Hazcards*. Other disposal follows relevant CLEAPSS guidance.

## **7 Activities and procedures**

### **7.1 Outdoor activities**

When planning any field trips etc, staff consult one or more of the following the employer's code of practice/CLEAPSS *Laboratory Handbook*.

### **7.2 Manual handling and working at height**

All regular operations involving lifting or carrying equipment, pushing trolleys, etc will be assessed to see if any may give rise to risks of injury (*Manual Handling Operations Regulations*) by a team consisting of the Science Lead / Health and Safety Officer / Lead Teacher.

Occasional (ie, one-off) manual-handling operations will be assessed by the staff member(s) before attempting them. Problems will be reported to the Science Lead/ Health and safety Officer.

See section 10 for the names of the staff members currently with these functions.

Following risk assessments under the *Work at Height Regulations*, when it is impossible to avoid storage or display above head height, glass or other fragile items are never stored above head height and only light-weight and rarely-used items are stored there. When displaying items at high level or fetching or replacing items stored at high level, step ladders or kick stools are used; staff never climb onto laboratory stools or benches.

### **7.3 Security**

Access to laboratories and preparation rooms will be controlled to comply with the *Management of Health & Safety at Work Regulations*. All Laboratories/ storerooms are to be kept locked at **all times** except when in use. It is the task of the staff member leaving such a room to see that the room is empty, and that the door is locked. All laboratories which are left open are cleared of all hazards, including shutting-off all services when supervision by a qualified science teacher / suitably trained teacher or teaching assistant comes to an end. No class can be in a laboratory without supervision by a qualified science teacher, familiar with the departmental safety procedures.

Any non-science staff who must supervise any class in a laboratory will receive brief training in laboratory rules. The guidance for such staff is filed as an Appendix to this policy in the reference copy kept in Reception and laminated copies to give to such staff are kept in the safety file in the science Laboratory.

### **7.4 Concern for others**

All science areas are made safe for cleaners or contractors to work in before these persons are allowed to proceed.



## **8. Emergency procedures**

### **8.1 Fire**

Science staff will follow the normal school procedures in case of major fires. All science staff are trained to deal with minor bench fires, clothing fires and hair fires. This training is supported by regular drills arranged by the Science Lead. See section 10 for the name of the staff member currently with this function.

Advice on fire-fighting is given in sections 4 of the CLEAPSS *Laboratory Handbook*.

### **8.2 Spills**

Trivial spills are dealt with using damp cloths or paper towels. Spills of any amount which do not give rise to significant quantities of toxic or highly-flammable fumes ('minor spills') are dealt with by teachers or technical staff using a 'spill kit' prepared for this purpose in accordance with section 7 of the CLEAPSS *Laboratory Handbook*. Spill kits are kept in the chemical storeroom.

Major spills are those involving the escape of toxic gases and vapours or of flammable gases and vapours in significant concentrations. (Small amounts can be 'major spills' if spilt in small rooms.) Staff are trained in the appropriate procedures which may involve calling the Fire and Rescue Service. This training is supported by regular drills arranged by the Science Lead. See section 4 for the name of the staff member currently with this function.

### **8.3 Injury**

Science staff will follow the normal school procedures in cases that require first aid. Science staff are trained to carry out immediate remedial measures (eg, eye rinsing), while waiting for first aiders, after accidents which occur in science. See the most recent edition of the CLEAPSS *Laboratory Handbook* section 5.

See section 4 for the name of the person responsible for coordinating training in immediate remedial measures.

### **8.4 Reporting procedures**

Injuries or suspected injuries to a pupil or a member of staff, dangerous occurrences and instances of damage or theft will be reported using the standard school procedures. Following an injury, so that the Regulations (*RIDDOR*) can be complied with, the accident must be reported to James Docherty Head of Education.

Dangerous situations and incidents which might have resulted in injury ('near-misses') should be reported to the Wayne Traynor Health and Safety Officer and recorded on the One Drive system. These will be analysed and discussed at weekly Staff meetings.

## **9 Laboratory rules for students**

The rules for students during science lessons are as follows.

## Laboratory Rules

The biggest danger in the lab is **YOU!** You are at risk when you don't understand the hazards or you are careless, or both. The person most likely to suffer from your mistakes is **YOU!** Report any accident or breakage to your teacher.

1. Only enter a lab when told to do so by a teacher. Never rush about or throw things in the lab. Keep your bench and floor area clear, with bags and coats well out of the way.
2. Follow instructions precisely; check bottle labels carefully and keep tops on bottles except when pouring liquids from them; only touch or use equipment and materials when told to do so by a teacher; never remove anything from the lab without permission.
3. Wear eye protection when told to do so and keep it on from the very start until all practical work is finished and cleared away.
4. When using naked flames (eg, Bunsen or spirit burners or candles), make sure that ties, hair, baggy clothing etc are tied back or tucked away.
5. Always stand up when working with hazardous substances or when heating things so you can quickly move out of the way if you need to.
6. Never taste anything or put anything in your mouth in the laboratory. If you get something in your mouth, spit it out at once and wash your mouth out with lots of water. Tell your teacher.
7. Always wash your hands carefully after handling chemicals, microbes or animal and plant material.
8. If you are burnt or a chemical splashes on your skin, wash the affected part at once with lots of water. Tell your teacher.
9. Never put waste solids in the sink. Put them in the bin unless your teacher instructs you otherwise.
10. Wipe up all small spills and report bigger ones to your teacher.

## 10. Staff roles and Emergency contacts

### Staff roles

Staff roles and/or emergency contacts updated on: .....	
Advice on health & safety and all aspects of practical science generally	CLEAPSS <b>Helpline</b> 01895 251496. Email: science@cleapss.org.uk
[Local authority or MAT science [adviser] / [ inspector] / [consultant]]	[... .. tel .....
[Local authority or MAT health & safety adviser]	[... .. tel .....
Overseeing health and safety on this site	Wayne Traynor
Overseeing health and safety in the science department	Jodie Unau
[Science department health & safety officer]	Jodie Unau /Wayne Traynor
Senior technician	Jodie Unau
Various training functions	See table in section 4.
Subject specialist for consultation over health & safety matters in biology	Jodie Unau
Subject specialist for consultation over health & safety matters in chemistry	Jodie Unau
Subject specialist for consultation over health & safety matters in physics	Jodie Unau
Overseeing the checking of activities against the model risk assessments and recording significant findings	Jodie Unau
Detailed checking of activities is further delegated by courses/subjects] / year groups	Jodie Unau
[The person trained to test fume cupboards]	N/A
The person trained to do electrical inspection and Testing	JLS Electrical.
[The teacher in charge of radioactive sources (Radiation Protection Supervisor (Schools), RPS (Schools))]	N/A
[The employer's Radiation Protection Adviser, RPA]	N/a
[The local authority's Radiation Protection Officer, RPO]	[... .. tel .....] N/a
The person in charge of chemical storage and disposal	Jodie Unau

### Emergency contacts

<b>Emergency advice</b>	CLEAPSS <b>Helpline</b> 01895 251496
CLEAPSS can provide support and guidance with all of these situations.	
<i>Serious accident:</i> Ambulance service	[999]
<i>Serious accident:</i> School first-aiders	Vicky Vandeveld
<i>Serious accident:</i> School health & safety officer	Wayne Traynor
<i>Serious chemical theft:</i> Police or Police anti-terrorist hotline	[999] ] or 0800 789 321
[ <i>Serious accident:</i> Employer's health & safety officer]	Dominic Macauley
<i>Major chemical spill:</i> Fire & Rescue Service Chemical Incident Unit	999
<i>Gas leak:</i> Gas company	... .. tel ..... if mains gas call 0800 111 999
[ <i>Radiation accident:</i> Local authority's RPO]	[... .. tel .....] N.A
[ <i>Radiation accident:</i> Employer's RPA]	[... .. tel .....] N/A
<i>Animal welfare:</i> Veterinary practitioner	... .. tel ..... N/A