

Science Department Health and Safety Policy

".. pay attention to what I say; turn your ear to my words,keep them within your heart; for they are life to those who find them and health to one's whole body."

Proverbs 4:20-22 20

Science Department

Health and Safety Policy

2024 – 2025

St John Wall Catholic School

SCIENCE DEPARTMENT HEALTH & SAFETY POLICY

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.

The science department maintains this document. It is copied to all new members of staff, i.e., teachers, technicians, trainees, etc working in the department. Staff are expected to sign the list kept in the Health and Safety folder to show that they have received a copy. A reference copy, together with various Appendices, is kept by the HOD, 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 logged in the school office and another passed to the employer for endorsement.

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, i.e., teachers. Staff who work in the department occasionally, technicians, teaching assistants and other support staff (e.g., SEN and EAL 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 employer, the **Board of Governors**, has the ultimate duty to ensure the health and safety of employees and others on the site and hence in this department.

This employer has not currently issued any local instructions specific to science.

The task of overseeing health and safety on this site has been delegated by the employer to the **School Business Manager/Site Manager**. Within the science department this task is further delegated to the **Head of Department** and the **Lead Science Technician** who has the particular function of maintaining this policy document. See section 10 for the names of the staff members currently with these functions.

This policy is reviewed annually during the **Summer term**.

3.2 Communications

It is acknowledged that communication of health & safety information is of the greatest importance and is the task of the **Head of Department**.

In this department, all staff are issued with this policy. A reference copy is kept in the **prep room**. 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*. The **Lead Technician** keeps records of monitoring.

Checklists on resources and facilities for daily, weekly, each term and annual use by technicians are customised from those suggested in CLEAPSS Guide L248 *Running a Prep Room*. The timetable for such checks is kept with the reference copy of this policy. Records of the checks are kept by the **Lead Technician** in the *Safety Check File*.

4. Training policy

The person with the task of seeing that training is provided is the **Head of Department** and **CPD Coordinator**.

Generally, this department follows guidance in the CLEAPSS documents L238, *Health and Safety Induction and Training of Science Teachers* and L234, *Induction and Training of Science Technicians*, suitably customised; to identify the training needs of staff.

Particular 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	Head of Department, Science mentor
Health and safety of trainees on teaching practice	Head of Department, class teacher
Induction of newly-appointed technicians	Lead Technician
Immediate remedial measures and other emergency procedures (spills, bench fires, etc)	Head of Department, Lead technician, class teacher
Training in the use of specialist equipment, chemicals or procedures (in line with CLEAPSS guides L238 and L234, as customised)	Head of Department / Lead Technician
Health & safety training of non-science support staff	Head of Department] / Lead Technician
Health and safety of non-science teachers using laboratories	Head of Department
Manual handling for all staff using laboratories	Head of Department
Healthy and safe procedures for laboratory cleaners	Head of Department
Regular update training (covering new or changed regulations, new equipment etc)	Head of Department

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 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. The employer has endorsed the use of the following publications as sources of model (general) risk assessments.

CLEAPSS publications generally
CLEAPSS, *Hazcards*, current edition
CLEAPSS, *Laboratory Handbook*, current edition
CLEAPSS publications generally
CLEAPSS, *Hazcards*, current edition
CLEAPSS, *Recipe Cards*, current edition
CLEAPSS, L93, *Managing Ionising Radiations and Radioactive Substances*, (under revision, 2007)
ASE, *Safeguards in the School Laboratory*, ASE, 2006 (11th Edition), ISBN 978-0-86357-408-5
ASE, *Topics in Safety*, ASE, 2001 (3rd edition), ISBN 0863573169

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, i.e., **the scheme of work and technician notes**. See section 10 for the member of staff with the task of overseeing this process.

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**. In order 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, i.e., size, availability of services and whether or not 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, e.g., high voltages, heavy masses, etc.

Since 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 Head of Science. 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.

For technicians' activities in and around the prep room, the assessments in CLEAPSS publication PS25, *Model Risk Assessments for Laboratory Technician Activities* have been customised and form an Appendix to this document, kept with the reference set.

6 Equipment and resources

6.1 Fume cupboards

The *COSHH Regulations* require the regular testing of fume cupboards (maximum interval 14 months) with a quick check before use. Testing normally takes place each year in the **summer term**. The **School business manager** has the function of seeing that this happens. This employer has arranged a contract with **TCS Ltd** who will be allowed access to carry out the test. The records of the tests are available for staff reference and for inspection by the employer's representative or an HSE Inspector in the **School Business Manager /Site Managers office**.

See section 10 for the names of the staff members currently with these functions.
All users have been trained to carry out a quick check that a fume cupboard is working before use.

No smoking of cigarettes is permitted in the school.

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 **School Business Manager /Site Manager** has the function of seeing that this happens within the science department. Testing normally takes place each year during the **Summer Vacation**

Completed schedules are kept by the **School Business Manager /Site Manager** 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

There are no radioactive sources used in the department. Sources were removed Nov 2016, see file.

6.4 Pressure vessels

Autoclaves, pressure cookers and model steam engines need periodic inspection under the *Pressure Systems Safety Regulations*. Inspection normally takes place each year in the **summer term**

In accordance with this employer's Code of Practice, the appropriate written scheme of examination is selected from CLEAPSS Guide L214b *Examining Autoclaves, Pressure Cookers, Model Steam Engines: Written Scheme of Examination*, certified by the Head of Department and used by the competent person (see section 10) to carry out the examination. Records of examinations are kept in the *Safety Check File*.

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 through publications and directly.

Equipment restricted to those users who have received special training (see section 4, *Training Policy*) is labelled accordingly.

Any user who discovers a hazardous defect in an item of equipment must report it to the **Lead Technician and/or Head of Department**.

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*). **Prescription safety spectacles are to be ordered from any optician and the employer will meet the full cost of the safety features. Laboratory coats are supplied by the employer to the member of staff, the cost of which can be claimed against income tax, the member of staff is to carry out the laundry of the coat.**

The employer expects eye protection to be available for pupils, 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. (Face shields supplied for Covid19 do not provide adequate protection and must not be used for practical science)

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**.

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 **Lead Technician** 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 policy*) 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* (2016 edition or later). Other disposal follows guidance in the relevant section of the CLEAPSS *Laboratory Handbook*.

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 (**kept in the school's main office**) and 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 **Head of Department, Lead Technician and the School Business Manager/Site Manager**.

As it is sometimes necessary to carry chemicals or equipment through heavy fire doors, we have assessed risks under both the *Manual Handling Operations Regulations* and under the *Regulatory Reform (Fire Safety) Order* and will always use two people, one to hold open the door, the other to carry the items.

Occasional (i.e., one-off) manual-handling operations will be assessed by the staff member(s) before attempting them. Problems will be reported to the **Head of Department, Lead Technician and the School Business Manager/Site Manager**.

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, only lightweight, rarely used items and over stock items i.e. beakers and test tubes 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 preparation rooms and store rooms 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. No class / student is allowed to work or be in a laboratory without supervision by a qualified science teacher, familiar with the departmental safety procedures, or other adequate supervision.

Any non-science staff that have to 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 the **prep room**. Laminated copies are available in each lab.

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. Regular drills arranged by the Head of Department support this training. See section 10 for the name of the staff member currently with this function.

Advice on fire fighting is given in sections 4 and 5 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*. A general spills kit is kept in the prep room. The spills kit specifically for alkali metals, potassium, sodium and lithium is stored next to the cupboard containing these metals in the Chemical Store and is always put out when these metals are requested for a practical.

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. Regular drills arranged by the Head of Department support this training. 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 (e.g., eye rinsing), while waiting for first aiders. See the most recent edition of the CLEAPSS *Laboratory Handbook* section 5. Instructions for immediate remedial measures can be found at the end of this document.

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

9. 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 report form must be returned to the schools main office as quickly as possible. The accident should also be recorded in the school office and in the health and safety folder.

Dangerous situations and incidents which might have resulted in injury ('near-misses') should be recorded and passed on to the Head of department. These will be analysed and discussed at departmental meetings.

10. Staff roles and Emergency contacts

Staff roles

Staff roles and/or emergency contacts	
Advice on health & safety and all aspects of practical science generally	CLEAPSS 01895 251496
Local authority health & safety	Education Safety Services Birmingham City Council 10 Woodcock Street Birmingham, B2 2QF Telephone: 0121 303 2420 schoolsafety@birmingham.gov.uk
Overseeing health and safety in this school / on this site	J. Whitehouse School business Manager and Site Manager
Overseeing health and safety in the science department	Head of Department
Science department health & safety officer	Head of Science and Lead Science Technician
Lead technician	Lead Science Technician

Various training functions	See table in section 4.
Overseeing the checking of activities against the model risk assessments and recording significant findings	Head of Science and Lead Science Technician
The person trained to test fume cupboards	TCS Ltd – Tel 01942 679600
The person trained to do electrical inspection and testing	See J. Whitehouse
The technician in charge of radioactive sources (Radiation Protection Supervisor, RPS)	N/A
The employer's Radiation Protection Adviser, RPA & RPO	N/A
The person considered competent to examine pressure vessels	Need to out source
The person in charge of chemical storage and disposal	Lead Science Technician
The person in charge of manual handling	J Whitehouse School business Manager and Site Manager
The union health and safety representative(s)	None available onsite

Emergency contacts

Emergency advice	CLEAPSS 01895 251496
<i>Serious accident:</i> Ambulance service	999 / 9-999
<i>Serious accident:</i> School first-aiders	L.Ellis, A Reynolds, I Pollock, Y Bryan
<i>Serious accident:</i> School health & safety officer	J Whitehouse internal tel 229 or 302
<i>Major chemical spill:</i> Fire & Rescue Service Chemical Incident Unit	999 – West Midlands Fire Service
<i>Gas Leak</i>	National Gas Emergency service tel 0800 111 999
<i>Radiation accident:</i> Hospital able to deal with radiation incidents	Q.E. Hospital tel 0121 627 2000
<i>Radiation accident:</i> Employer's RPA	Graham Hart

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 water tap with tubing for eye washing / eye wash station; the main gas Stopcock; the main electricity switch and the nearest spill kit.
4. Laboratories must be left safe. Special arrangements must be made for equipment that has to be left running overnight and hazardous equipment that has to 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 stopcock and electricity at the laboratory main switch.
5. Eating, drinking and the application of cosmetics should not take place in laboratories, storage areas or preparation rooms unless an area in which it is safe to do so has been created. Pupils should 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. Pupils must not be left unsupervised in a laboratory. Staff needing to leave a class briefly must assess the risks of doing so, perhaps arranging 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, e.g., 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. Special arrangements must be made if access is required to a fire-escape route. Pupils must never be allowed into preparation rooms unless 100% supervision can be guaranteed. Laboratories must only be used by teachers who are not scientists for teaching or registration after they have received special training/ or if the laboratories have been specially cleared. 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. Teachers are responsible for the safety of themselves and others within their classroom. Items of significant risk such as sharps, liquids of high concentration and flammable liquids need to be counted out to pupils and back into the staff member before pupils leave the room. 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 experiments, 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 making a further risk assessment, checked 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, [using the CLEAPSS *Student Safety Sheets*, where appropriate].
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 large class size or indiscipline, health and safety cannot be maintained during certain practical work, the work should be modified or abandoned. This decision should be reported to the Head of Department / science coordinator / subject specialist.
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, the Head of Department must give another science teacher this responsibility.
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.

Appendices

Safety Rules in the Laboratory for Cover/ Supply Staff

Cover/Supply Teacher **MUST:-**

NEVER leave pupils unattended in the Laboratory

Make sure water taps are **TURNED OFF** before leaving the laboratory

CLOSE all windows

LOCK the door when leaving the laboratory (key can be borrowed from the science technician)

Students **MUST NOT:-**

Eat or drink in the laboratory

Run in the laboratory

Sit on the benches or tables

Open cupboards or drawers

Students **MUST:-**

Put **rubbish in bins**

Hang **coats on Coat hooks**

Put **bags on the floor**

If you require assistance during the lesson, send a responsible pupil with a pass to the Head of Department or Second in Science.

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 for 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 (Bunsen burners, 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 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 splash 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 waste bucket provided, unless your teacher instructs you otherwise.
10. Wipe up all small spills and report bigger ones to your teacher.

Supporting practical science, D&T and art

- in schools and colleges

GL343 - Guide to doing practical work during the COVID-19 pandemic - Science -
Version 4.11 – 15th June '22

This guidance is additional to all standard operating procedures across your school, any guidance from your employer, and CLEAPSS' general advice. It is based on guidance from the UK Government and Public Health England, and is also aligned with guidance in Northern Ireland and Wales.

This guide is likely to be updated frequently. Regularly check that the version number in the title above is the same as that in the version on the website. Details of changes are listed on the final page of this document in the revisions list.

The guide is split into two parts:-

- Part One details things you should do to comply with current HSE COVID-19 guidance for workplaces and DfE schools COVID-19 operational guidance.
- Part Two lists things you **could** be directed to implement by your school, employer, or local authority, these should only be put into place if expressly directed to do by your school management.

Part One - Controls you should have in place

Hand Hygiene

Pupils and staff should always wash their hands before and after handling equipment for practical activities. Ideally, this should involve soap, water and paper towels, which is the most effective hand washing method. If this is not manageable, then hand gels should be used, and these should be non-alcohol-based. When purchasing non-alcohol-based hand gels ensure they claim to kill 99.99% of viruses and bacteria (this is a regulated term in the UK, meaning the product has passed a BSI test). Note: one or both of these hand cleaning episodes may be part of the school's more general hand hygiene regime. Pupils may, for example, be expected to clean their hands before entering each classroom. If this is reliably the case there would be no need to repeat the process once pupils are in the laboratory.

When choosing hand sanitisers, take account of the following:

- Alcohol-based hand gels present a genuine fire risk and thus should not be used in science labs/lessons. At skin temperature and/or with the action of clothing as a wick, hand gels containing alcohol have been shown to be highly flammable.
- To ensure users are aware of the hazards, schools which are dispensing hand sanitiser from bulk containers to smaller ones, should label the small containers with labelling similar to that on the bulk container. This label should also include any instructions on how to use the hand sanitiser.
- Instead of gels schools could use skin-friendly cleaning wipes that claim to kill 99.99% of bacteria and viruses. For use in science these should be non-alcohol based.

Cleaning

By implementing effective hand washing as a control, it is not appropriate to put in place additional cleaning or quarantine arrangements for science equipment. This includes eye protection, goggles, and microscopes. The cleaning of science equipment should now return to the standard protocols for such items.

Furniture, including benches and stools will need to be cleaned in the same way as furniture in other classrooms in the school. Refer to your school's guidance for this.

Alcohol-based cleaning products should not be used in the science department. Note that some cleaning products may contain a small amount of alcohol, below the threshold for classification as 'flammable'. This is there to help the mixture evaporate after the appropriate contact time. Only use cleaning products which do not have the flammable symbol on the packaging.

Ventilation

Good ventilation reduces the concentration of the virus in the air, which reduces the risk from airborne transmission. The Health and Safety Executive (HSE) has useful guidance on this issue available [here](#).

All working spaces should have as much ventilation as is reasonably practical to ensure the maximum natural air supply. Opening windows and running mechanical ventilation systems is helpful.

Air condition systems that re-circulate the air should ideally be set to a non-re-circulatory mode. Note that re-circulatory systems can mask poor levels of ventilation.

Running fume cupboards will not make a significant contribution to ventilation. Fume cupboards only move a small amount of air, and because they are often noisy, this practice is not recommended.

Staff should consider how the flow of air in and out of labs and prep rooms is achieved. This will usually require looking beyond the room itself into corridors and other communal areas.

In cooler weather windows should be opened just enough to provide constant background ventilation and opened more fully during breaks to purge the air in the space.

Schools wanting to determine how effective their ventilation is, should consider monitoring the air quality with a CO₂ sensor.

CO₂ levels of between 800-1000ppm are indicative of a well-ventilated room. If you find levels are higher or rising, take action to increase ventilation in the affected room(s). See [CLEAPSS Guide PS015](#) for more guidance on this

Part Two - Additional controls you may be directed to implement

The vast majority of schools are not expected to implement the following controls, unless implementation is directed by the school management team or employer.

In addition to the advice contained in this guide, there may be situations in your school where the guidance in the CLEAPSS documents below may be of relevance or help to support practical work.

[GL336 - Advice for schools with only key worker pupils on site](#)

[GL338 - Practical activities for pupils attending school during extended periods of closure](#)

[GL339 – Practical activities for pupils at home during extended periods of school closure](#)

[GL345 - Guidance for science departments returning to school after an extended period of closure](#)

[GL352 – Guidance for practical work in non-lab environments](#)

[GL353 – Guidance for schools where pupils spend all day in a lab](#)

Face coverings

CLEAPSS believes that face coverings do not present a greater fire risk during practical activities than for any other item of clothing, although as with other clothing it is important to ensure any straps/ties are kept short and tight.

Where eye protection is required by an activity's risk assessment, it must be worn. However, wearing eye protection with face coverings can lead to fogging.

Anti-misting sprays and home-grown alternatives, such as wiping the lenses of eye protection with baby shampoo, are only partially effective. Some suggestions, for example, the use of washing up liquid, can increase the risk of eye irritation, and other products potentially risk damaging the eye protection.

Safety goggles are less prone to fogging than safety glasses. If you have access to goggles, pupils (particularly at GCSE and A level) could use these in place of safety glasses as a temporary change in practice.

The extent of fogging can be reduced by the following measures

- If using a mask with a metal-reinforced nose bridge, shape this carefully to form a seal over the nose and along the cheek
- pull the face covering up under the eye protection and use the frame to weigh it down
- twist the face covering loops before putting them around the ears, to get a tighter fit
- Keep the eye protection at, or slightly warmer than, room temperature

Whatever approach you use it will not completely remove the risk of fogging and so all pupils need to be told in advance what to do if their eye protection becomes fogged.

- Do not immediately remove the eye protection, because there is a reason for wearing it
- Stop the activity you are doing
- Step back from the equipment carefully
- Wait for the fogging to clear

- If fogging does not clear then remove the eye protection and allow it to clear naturally
- Avoid wiping the lenses with paper towels or other materials that can scratch the lenses

IRM PPE Kits

IRM PPE Kits will need to be available in all labs when you are asked to implement additional cleaning measures by your school.

All rooms used for practical work, will need the following items, kept in a sealed clear plastic bag, marked 'For emergency use only' and stored near the eye wash station. These items are to be worn/used by the teacher or technician if they need to administer IRM.

- disposable gloves
- a fluid-resistant face mask (FRSM Type IIR)
- disposable plastic apron
- Face shield or goggles (not safety specs)
- paper towels,
- plastic bags for the disposal of used equipment and for any contaminated clothing.

All PPE should be worn properly, and removed with care.

Wash hands immediately and thoroughly before and after removing any of this PPE.

Used PPE should be removed and stored in a bag, labelled as 'potentially contaminated' and which should be disposed of appropriately (store for 72hrs and then place in normal non-recycling waste).

Practical Activities

All practical activities should be seen as possible, as part of a return to a more 'normal' school life.

However if pupils are required to wear face covering in lessons then we recommend that the below activities are NOT carried out.

- Cheek cell sampling
- Lung volume / capacity & other breathing-based activities
- Activities which make use of saliva
- Activities which make use of straws or other equipment for blowing through e.g. blowing through lime water or using a musical instrument which you blow into to create a sound

This means all other 'regular' science activities including microbiology and dissection can be carried out.

Bubbles

If they are implemented by your school senior management, then checks should be made with your school as to whether to implement enhanced cleaning and/or quarantining of equipment alongside the introduction of bubbles. Schools will have different views on this and the decision will impact on how and where science practical activities can take place.

If pupil bubbles are allocated fixed locations where they stay for all of their lessons, this will raise the question of what can be done safely if science is being taught in a classroom. See [CLEAPSS guide GL352, Guidance for practical work in non-lab environments](#) for advice on this. If a bubble is based in a laboratory the opposite question of how other subjects can be taught safely in laboratories will arise. See [CLEAPSS guide GL353, Guidance for schools where pupils spend all day in a lab](#) for advice on this.

Pupils can continue to work in groups as long as they are from the same bubble.

Social Distancing

Staff need to carefully consider staff social distancing rules during break and lunch times when they are likely to congregate in the science staff office or prep room.

It is likely schools will have created their own rules for implementing the new DfE guidance, and science departments should follow these. However, the following offers some outline guidance on how to maintain appropriate social distancing in the context of science lessons.

Entry into the lab:

To help with distancing and access to the lab, corridors should be marked with safe waiting spaces, as in queuing systems at supermarkets. Pupils queuing into the lab will need supervision. Each queuing space should be marked with a number (starting at 1 closest to the door); the numbered space should correspond to the number of a workstation in the lab. Copies of the seating plan showing the position of the workstations and the maximum number of pupils permitted in the lab should be displayed on the lab door and around the waiting area. As pupils arrive at the lab they should wait at their space until they can be admitted to the room. Under the direction of the teacher, pupils will enter the lab individually and make their way to their workplace.

Sitting side by side and facing forwards

If your lab has moveable tables you can experiment with different configurations to ensure the best layout. In labs with fixed furniture this may not be possible.

Movement around the lab

This will need planning in advance. Things to consider include access to the door and/or fire exits, sinks & access to emergency equipment such as fire extinguisher.

You will need to consider how the pupils will access the equipment they need for the activity. The equipment needed by each pair/small group could be placed in a tray. Alternatively, items of equipment could be spaced out on side benches, provided that this area is still accessible to all pupils. The normal practice of getting each pair/small group to allocate one person the task of collecting apparatus should be rigorously enforced and pupils reminded of the need to stay socially distanced at all times.

Supervising pupils engaged in practical tasks

Teachers must aim to maintain social distance when observing pupils as they work through practical activities. This may present an issue if the teacher has concerns about the ability of the pupils to carry out the task safely without direct intervention from the teacher. If this is the case then the teacher should factor this into their risk assessment for the activity prior to the lesson. If necessary, consider a different approach to the activity, an alternative activity or doing a demonstration rather than a hands-on practical.

Getting the most from demonstrations

Clearly pupils cannot crowd around the front bench, however, if they stay in their work space they are unlikely to gain much from a traditional demonstration. A digital camera or visualizer coupled to a data projector can be used to project what is being demonstrated for all to see. Teachers will need to practice beforehand if they are not already experienced in using this equipment. See [CLEAPSS Bulletin 170](#) (Spring 2021) for more details about the use of visualizers.

· **Fume cupboards**

Practicals which require the use of a fume cupboard will require careful planning. Demonstrations in fume cupboards will have to follow the same rules as normal demonstrations. Where pupils need to use a fume cupboard, the social distancing rules should still apply, and the lab spacing layout may need to be adjusted to take account of this.

· **Prep rooms, science staff rooms and store rooms**

Staff working in prep and science staff rooms will need to adhere to the social distancing rules, which may reduce the working capacity of some smaller areas. Most chemical stores or other equipment store rooms are likely to be of a size that can accommodate only one person at a time.

Enhanced cleaning of science equipment, including eye protection

If you are instructed to implement an enhanced cleaning regime, then you will need to find out how it applies in your school. It could apply every time the equipment is used or if the school is implementing a bubbles system then it could apply when equipment moves from one bubble to another.

· **If schools implement a bubble system;**

Equipment can normally be shared by pupils within the same bubble. Departments will know how the bubbles are arranged in their school and can plan practical work accordingly. The following examples will apply.

Example 1. All of Yr7 are in a single bubble, and Yr7 lessons are happening in maths rooms. The equipment for one activity can move from maths room to maths room as long as it is only used by Yr7 pupils. Teachers and technicians should be reminded to thoroughly wash their hands before and after handling equipment.

Example 2. A Yr9 class in a single class bubble and pupils start a practical in one lesson, but don't finish it. If the equipment is then removed and not used by anyone else then the equipment can come back out to be used again the following lesson by the same Yr9 class.

Example 3. All of Yr11 are a single bubble, and all Yr11 are based in general teaching rooms for most of their lessons, but will go to specialist rooms for practical work. The equipment used by the first group can be stored and brought back into use for a second Yr11 group, or it will need to be cleaned (or stored for 72 hours) if it is to be used by other bubbles.

· **Demonstrations**

Teachers will need their own set of equipment for demonstrations and to show pupils how to carry out activities themselves. This equipment will need to be quarantined or, where possible, cleaned before it forms part of a set for pupils.

Equipment used by teachers to show pupils how to do an activity or part of an activity must not be 'borrowed' from one of the sets intended for pupils or given to pupils to use immediately after the teacher has handled it.

Both of these are common during class practical work. In practice, an additional set of apparatus will be needed for use exclusively by the teacher.

· **Transferring specialist equipment between groups/bubbles, where enhanced cleaning and/or quarantining of equipment is required**

Once a practical activity is over, the equipment will need to be collected in. It is most likely that it will next be used by pupils from a different bubble.

CLEAPSS has been advised by DfE (*Spring 2021*) that equipment could be cleaned between groups of pupils using 'standard cleaning methods'. We take this to mean that a 43 degree (or hotter) cycle of a standard domestic dishwasher can be used to clean equipment such as glassware without the need for further surface disinfection or quarantining.

All other equipment could be cleaned by wiping over all surfaces using a proprietary cleaning product designed to "*kill 99.99% of viruses and bacteria*", paying particular attention to frequently touched areas such as handles and switches.

CLEAPSS believes that, for a number of reasons, it is not practicable to clean some science equipment.

- Cleaning may damage the equipment, either mechanical damage or the effect of the cleaning product used (eg electronic balances & prepared slides)
- The equipment is so intricate that cleaning is either impossible or will take so long to do that it is impracticable (eg microscopes)
- There are too many items to make cleaning feasible in the time available (eg 4mm leads and associated crocodile clips)
- Cleaning is practically possible but there is insufficient technical support to make this process possible

As a consequence, CLEAPSS advises that quarantining the equipment for 72 hours will be the only realistic approach for most departments. Note: because most science equipment uses some plastics in its construction, it is easiest to apply a blanket 72hr quarantine rule to all equipment.

Departments will need to set aside sufficient, secure storage space to allow the quarantining of equipment between bubbles.

It may be possible to re-arrange the preparation room(s) to set aside existing racking for this purpose. Alternatively, it may be necessary to re-purpose a teaching space (perhaps one that is too small to allow safe social distancing for normal sized groups). If the latter approach is to be used the additional space should be easily accessible from the science labs and must be secure. Additional trays will likely be required

Resources placed in quarantine storage must indicate clearly when they are next 'safe to use'. This can be done by placing labels onto the tray containing the equipment and by organising the storage to create clear zones that themselves indicate when the equipment placed in them, can next be used safely.

Day used	Next day available for use
Monday	Friday
Tuesday	Monday
Wednesday	Monday
Thursday	Monday
Friday	Tuesday

It should be noted that the quarantine space for equipment next available for use on Monday will need to be much larger than for the other days of the week because of the impact of the weekend.

Normal rules around the storage of hazardous chemicals will still apply. For example, flammables must be returned to the flammables store. If these have been used by pupils in a lesson, they will need to

be subject to the same quarantine approach as the rest of the equipment, but this time located in the appropriate store. One way to make this easier would be for pupils to return items requiring specialist storage to a separate tray at the end of the lesson. This tray can then be labelled with the date for next staff use and placed in the appropriate store. (See Appendix 1 for example labels.)

If key equipment is needed before the 72-hour period has elapsed, perhaps because the total number of items is limited (eg low voltage power supplies), then cleaning could be considered to bring the item(s) back into use. Ensure the equipment is suitable for cleaning.

A department may be able to increase the availability of equipment that is suitable for cleaning by setting aside time, a day or an afternoon, when no new practical activity occurs so that cleaning can take place. If this approach is to be considered, sufficient space will be needed, which may require a lab or classroom to be set aside. Sufficient staffing will be needed.

Furniture, including benches and stools will need to be cleaned as per the guidelines for all classrooms in the rest of the school.

· **Eye Protection Cleaning – only when required by the school as part of enhanced cleaning or in Northern Ireland.**

- Ensure that eye protection is only used when required by the risk assessment ie where required due to the nature of the chemicals being used or the process involved requires it. It should not be routine procedure to wear eye protection/goggles when carrying out every practical activity.
- Where schools have stocks of suitable safety specs and goggles, these will need quarantining for 72hr between every use or sanitising (even with pupils in the same bubble). For more on this see Appendix 3.
- If you chose to quarantine the used eye protection (*which may be simplest, cheapest and easiest*), treat it like you would equipment for 72hrs. Refer to guidance above about how best to manage quarantining of equipment.
- To sanitise the eye protection, see [CLEAPSS Guide GL362](#).
- Alternatively, where the eye protection manufacturer has provided instructions on how to sanitise their product you can follow these, but do not use any sanitisers containing alcohol which are labelled as flammable.
- We know of some new UV based sanitising units, and ‘fogging machines’ but we do not recommend the use of these, as their effectiveness has yet to be fully proven.
- Staff will also need access to their own PPE, each member of staff should have personal eye protection and should be provided with non-alcohol-based antiseptic wipes for cleaning through the day. At the end of the day the eye protection used should be sanitised, see [Guide GL362](#).


Technical support considerations if some or all of the above optional controls are put in place

The following will need to be considered as part of the planning by technicians, teachers, and the head of department

- Technicians working in prep rooms will need to adhere to the social distancing rule, which may reduce the working capacity of some smaller prep rooms, and, therefore, how much technical work can be carried out. The prep room could overflow into an empty lab if one is available.


- Consideration should also be given to the division of tasks between technician team members working in the same prep room e.g. team members could be allocated specific subjects to support to reduce the need for technicians to be using/handling the same equipment.
- Technicians will need access to their own PPE. They cannot share re-useable gloves or eye protection. They should be provided with non-alcohol-based antiseptic wipes for cleaning eye protection through the day. At the end of the day the eye protection will need to be sanitised (see Appendix 2).
- There has to be sufficient technician time to allow prompt delivery and collection of practical resources as they cannot be left unattended in a lab/room which is occupied by pupils throughout the day. Give some thought to how the available technicians can manage this.
- Consider any manual handling issues arising from the transporting of resources.
- A system for managing the quarantine of equipment will need to be devised. This should include the allocation of sufficient storage space, which may mean using an additional secure storage area if space is limited in the prep room.
- If schools decide equipment must be cleaned between use by different bubbles (as opposed to quarantining) then thought has to be given to how the available technicians can manage this.

Appendix 1 - Example labels for quarantined equipment, you may want to colour code and/or laminate your labels. Only applies if enhanced cleaning has been implemented as an optional


	<p>This equipment was last used by:</p> <p>They finished using this on (Date):</p> <p>This equipment MUST NOT be used before (Date):</p>
<p>@CLEAPSS www.cleapss.org.uk science@cleapss.org.uk Tel. 01895 251496 Emergency Phone 07871 877 434</p>	

control measure.

	<p>This equipment was last used by:</p> <p>They finished using this on (Date):</p> <p>This equipment MUST NOT be used before (Date):</p>
<p>@CLEAPSS www.cleapss.org.uk science@cleapss.org.uk Tel. 01895 251496 Emergency Phone 07871 877 434</p>	

	<p>This equipment was last used by:</p> <p>They finished using this on (Date):</p> <p>This equipment MUST NOT be used before (Date):</p>
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	<p>This equipment was last used by:</p> <p>They finished using this on (Date):</p> <p>This equipment MUST NOT be used before (Date):</p>
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	<p>This equipment was last used by:</p> <p>They finished using this on (Date):</p> <p>This equipment MUST NOT be used before (Date):</p>
<p>@CLEAPSS www.cleapss.org.uk science@cleapss.org.uk Tel. 01895 251496 Emergency Phone 07871 877 434</p>	

Appendix 2 – Only applies if enhanced cleaning has been implemented as an additional control measure.

Transferring equipment between groups/bubbles where quarantining and/or cleaning is required

CLEAPSS believes that quarantining equipment for 72 hours is the most practicable option in most cases, however if equipment is needed before the 72 hours is up cleaning may be an option. See the table below for advice on some common types of equipment.

For further advice refer to the FAQ's section in Appendix 3.

Equipment type	Comments
Glassware / use of dishwashers	Domestic dishwashers can be used to clean equipment between bubbles. You should use a temperature setting (≥ 43 degrees), and 'normal' domestic dishwasher tablets. Note, this does not apply to eye protection which should be cleaned as per guidance elsewhere in this guide and in guide GL362 .
Hand washing of equipment	Where items won't fit in a dishwasher, equipment can be hand washed in a traditional way with normal washing up liquid and hot water. Note, this does not apply to eye protection which should be cleaned as per guidance elsewhere in this guide and in guide GL362 .
Mains-powered electrical equipment (e.g. low voltage power supplies)	Wipe thoroughly with wipes, paying particular attention to touch surfaces such as switches. Allow items to dry before using. Always follow the instruction for the wipes you are using. Do not spray with cleaning sprays
Items of equipment (not mains powered) e.g. Bunsen burners, 100g masses	Clean thoroughly using a suitable sanitiser either as a spray or wipe. Always follow the manufacturer's instructions.
Materials used in connection with microbiology activities	Sterilise as normal using a pressure cooker or autoclave
Very intricate pieces of equipment, e.g. oscilloscopes	Quarantine for 72 hours. Cleaning with wipes is unlikely to reach all areas and cleaning sprays may damage sensitive parts.
Small items e.g. 4mm plug leads and crocodile clips	Quarantine for 72 hours. Cleaning large numbers of these is likely to take too long to be practicable. Cleaning smaller numbers (for example for use by a teacher in a demonstration) may be appropriate, in which case wipes should be used. Avoid immersing items with metal parts into cleaning solutions.
Fabric items, e.g. cloths for static electricity activities	Quarantine for 72 hours. If possible, use disposable alternatives (recyclable if available) or wash in a washing machine set on a high temperature.

Reagent bottles used by pupils	Quarantine for 72 hours. Not practicable or safe to attempt to wipe over with wipes. (Note stock bottles used by technicians only are not shared between pupil bubbles and so do not need to be cleaned). Technicians should follow thorough hand hygiene measures at all times.
Books, workbooks, worksheets etc... (text books and pupil books)	Quarantine for 72 hours. Cleaning is not possible. Ink and binding agents used in school books mean they will likely contain some plastic polymers hence require quarantining for 72hrs.

Eye protection	<p>See CLEAPSS Guide GL362 for detailed guidance.</p> <p>Notes on disinfecting solutions:</p> <p>Virkon & Biocleanse. Experienced staff such as the technicians who prepare equipment for microbiology will be familiar with these disinfectants. Used correctly, these will sanitise eye protection, however, for the following reasons, CLEAPSS recommends only the use of sterilising fluid or tablets designed for sterilising baby feeding utensils:</p> <ul style="list-style-type: none"> · ‘Industrial’ disinfectants are known to leave a solid residue on the surface of the equipment. In the case of eye protection this will transfer to pupils’ skin and could cause irritation. · Pupils and parents may be anxious over the use of ‘industrial’ disinfectants on items placed close to the eyes. Using sterilising fluid or tablets designed for sterilising baby feeding utensils will help schools manage these anxieties. · The long-term effects of these on eye protection are unknown at this stage. Sterilising fluid or tablets are not known to affect the plastics typically used to make eye protection.
Lab-coats/Aprons	<p>CLEAPSS’ standard advice is for pupils not to use these in science. They are not necessary as PPE, and using them creates a number of additional safety issues.</p> <p>Technicians/teachers may continue to wear their own lab coat, which must regularly laundered and not shared.</p>
Fixed equipment, e.g. gas taps and sockets	<p>Having first turned off the supply at the isolating switch/valve, wipe thoroughly with wipes, paying particular attention to touch surfaces such as switches and valve handles. Always follow the instruction for the wipes you are using. Do not spray electrical sockets with cleaning sprays.</p>
Calculators, IT and other common electronic items like phones, laptops, data projectors etc	<p>Follow whole-school guidance on the use of such equipment.</p>

Microscopes	<p><i>Use by pupils in different bubbles:</i> Quarantine for 72 hours. Cleaning with wipes is unlikely to reach all areas and cleaning sprays may damage sensitive parts.</p> <p><i>Use by different pupils within the same bubble:</i> Eye pieces to be wiped with a non-alcohol-based sanitiser wipe, before and after use, ideally by the user. Eye pieces should not be immersed in sanitising solutions as this could damage the eye piece.</p> <p>Alternatively, you could issue each student with their own acetate eye shield to cover the eye piece with. Quarantine or sanitise these after use. For a template please GL343b. See Bulletin 170 (Spring 2021) for more details.</p>
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Appendix 3 - Frequently asked questions (FAQ's)

The following FAQs apply in all situations

Can you confirm that this hand sanitiser/wipe/surface disinfectant is suitable?

CLEAPSS can't confirm the suitability of any particular product. Ensure the product claims to kill 99.99% of viruses and bacteria. Choose products from an established company that can be relied upon to back up their claims with compliance with the appropriate standards.

Can we use hand sanitisers in place of water irrigation in case of skin contact?

No. Proper irrigation with water, as on the Emergency cards, is required for chemical(s) in the eye or spills on the skin.

How do we dispose of our disinfecting wipes?

Follow the instructions for the wipes you are using, as this may vary from brand to brand.

Can we use fans / hair driers / balloon pump / Bunsen burners or other equipment which creates air movement?

Although there is clear evidence that COVID-19 is an airborne disease, use of equipment which creates movement of air will not increase the likelihood of transmission of COVID-19. In many cases the increased airflow around the lab would be a good thing as increased ventilation rates should always be encouraged.

Does CLEAPSS have any advice about the Lateral Flow Testing (LFT) now taking place in schools?

CLEAPSS is not a medical organisation, therefore, it is not able to provide guidance on Lateral Flow Testing in schools.

Annual inspection and leak testing of radioactive sources.

The HSE have not extended the relaxation of their requirements around the leak testing of sources. The inspection and leak testing following our procedure in [guide L093](#) is straightforward and relatively quick to do, and thus should be followed as per normal.

Can we make our own hand gels for hand washing?

Schools should not make their own gels. The chemicals schools have or are able to buy are not guaranteed safe for use on the skin, nor are school labs designed or clean enough to produce cleaning products for making products for use on the skin.

The following FAQs ONLY apply if additional controls are put in place

How should we protect ourselves if we need to carry out IRM?

See the details on page 4. Putting on the additional PPE if needed will take time, so it is advisable for staff to try a 'dry run' to work out how best to don the PPE quickly and safely, and how to package and store it to ensure it is easily accessible when needed for use. Think through how you will carry out IRM to make sure you know how to do it safely in your lab or prep room.

Subject to assessing the risks, can we carry out all activities as before?

CLEAPSS still advises avoiding a very small number of activities which pose a raised risk of transmitting infection. See page 4 of this guide for more information on this.

Can we carry out microbiology and/or dissection activities?

Yes. These are all possible (subject to the normal risk assessments being followed). Standard bacterial and fungal microbiology activities (which use agar media) present no greater risk to the proliferation of COVID-19 than any other surface. Please refer to the short list on page 4 of this guide for those activities we currently advise against doing.

Our school is planning to run a 'traditional' open evening, can we do this safely?

It is down to the school, and the local authority / employer to set the rules around whole school open evening events. Careful thought is needed on how to ensure social distancing can be maintained during the event. Consider carrying out online events instead of inviting additional visitors to the school. Refer to [Guide PS058](#) for further guidance on running an open evening.

We have been asked to make pupils and staff wear face coverings. Is this a fire risk?

No more than for any other item of clothing, ensure any straps/ties are kept short and tight.

Can we store our quarantined equipment in lab?

During the 72hrs of quarantining the equipment has to be kept out of the reach of pupils, this could be in labs if kept in locked cupboards. There are no special COVID-19 ventilation or other requirements for quarantine storage.

However, leaving trays of equipment on benches at the back of a lab would not be suitable. Remember the 'normal' storage rules still apply, ie dropper bottles of ethanol used by pupils will need to be stored/quarantined in a flammables cabinet.

Our drains lead into a septic tank, can we use sterilising solutions?

Generally, we advise against the disposal of bleach to sewer systems that are not connected directly to the mains sewer drains. There may be some septic tank systems that can tolerate small amounts of diluted bleach (Milton*); we advise in these cases you consult and obtain specific permission to dispose of waste bleach as effluent from the person responsible for the maintenance and proper-working of the septic tank system. In such cases, it would be sensible for the school to undertake a risk assessment to ensure the addition of the waste bleach does not unduly affect the treatment system nor adversely impact the environment.

N.B. * this applies to other similar brands of sterilising solutions

Can we use a baby bottle steam sterilising unit to clean eye protection/goggles/equipment?

Yes, this is possible, though it should be noted that these units are generally very small therefore you will only likely get small numbers of items in them.

Why does eye protection need to be sanitised between each use? Could we give each student their own?

Eye protection is in contact with the face, close to the eyes and nose which are prime entry points for viruses. Therefore, CLEAPSS advises sanitising it each time. Allocating eye protection to each student is difficult to manage. It would be difficult to organise storage without the risks of cross-contamination. If students take it out of the lab, you don't know what happens to it.

Why do we need to use such a high concentration of baby-bottle sterilising solution to sanitise eye protection?

WHO advice is to use a concentration of chlorine-based products of 1,000 ppm avCl for treating surfaces against the risk of COVID-19.

Can pupils work in pairs or share a bench in science

Yes. However, distancing should be maintained 'wherever possible'. This means that you need to consider what you can do to keep the pupils and staff as far apart as practical within the constraints of your room and facilities. Where you can increase the space between pupils and avoid them facing each other, you should do so.

Cleaning microscope eyepieces

Does cleaning microscope eyepieces with a suitable wipe, leave residues which are harmful for eyes?

No. After wiping, an eyepiece dries quite quickly (pupils could be instructed to wait until the eyepiece has dried before viewing a slide) and it is also very unlikely that the eyeball will come into contact with the eyepiece. Our wipes took about 1½ mins to dry. Alternatively, you can use a cover over the eye piece.

Can pupils in the same bubble share cameras with no cleaning in between?

In the first instance instruct students to use the digital viewfinder, rather than the eyepiece. As an added precaution, get students to wipe the eyepiece with a non-alcohol-based sanitiser wipe, before and after camera is used, just in case they absent-mindedly use the eyepiece although this may not be necessary if students can be trusted to follow instructions. We have used non-alcohol wipes on our camera without any problems, they are also bleach free so should not cause corrosion damage.

Can e use fog, mist or UV for cleaning?

Please refer to the HSE guidance on - Disinfecting using fog, mist and other systems during the coronavirus (COVID-19) pandemic

<https://www.hse.gov.uk/coronavirus/disinfecting-premises-during-coronavirus-outbreak.htm>

Revisions list

Version 4.01 changes (14th July)

- Fully reviewed and revised against the latest DfE, Welsh & NI Guidance published July 2021

Version 4.02 changes (1st September)

- Minor updates to update links and reflect the return to schools.

Version 4.03 changes (17th September)

- Minor typo correction
- Reinforced that all practical's are possible, unless your school has enacted its outbreak management plan, see pages 1 & 4
- Added FAQ about making your own hand gels, see page 12
- Added FAQ about what a school outbreak management plan is, and where to find further guidance on them. See page 12

Version 4.04 changes (20th September)

- Removed regional guidance on cleaning, after Wales removed requirement for additional cleaning. All regions can now follow the same cleaning guidance. See page 2
- Updated FAQ on school outbreak management plans, to add details about the Welsh equivalent, and added hyperlink to Welsh guidance. See page 12

Version 4.05 changes (26th October)

- Added detail about the requirement for cleaning of eye protection and eye pieces in Northern Ireland. See Page 2

Version 4.06 changes (1st December)

- Changes due to new COVID-19 variant OMICRON made, see page 3

Version 4.07 changes (11th January 2022)

- Moved guidance on face coverings to Part 1, reflecting current requirements for face coverings to be worn in schools. No change to guidance – See page 3

Version 4.08 changes (19th January 2022)

- Moved guidance on face coverings back to Part 2, reflecting a change in DfE requirements. No change to guidance – See page 4

Version 4.09 changes (8th February 2022)

- Moved guidance on inadvisable practical's back to part 2 – See page 4

Version 4.10 changes (2nd March 2022)

- Various minor revisions to align with latest COVID guidance.

Version 4.11 changes (15th June 2022)

- Removed requirement to sanitise eye protection for schools in Northern Ireland, this matches latest guidance released for schools in Northern

Ireland. No other changes in guidance. <https://www.education-ni.gov.uk/coronavirus-covid-19-guidance-schools-and-educational-settings-northern-ireland>

Ratified: 09/10/2024

Review Date: 09/10/2025

(This policy will remain in force beyond the review date if no updates are required)