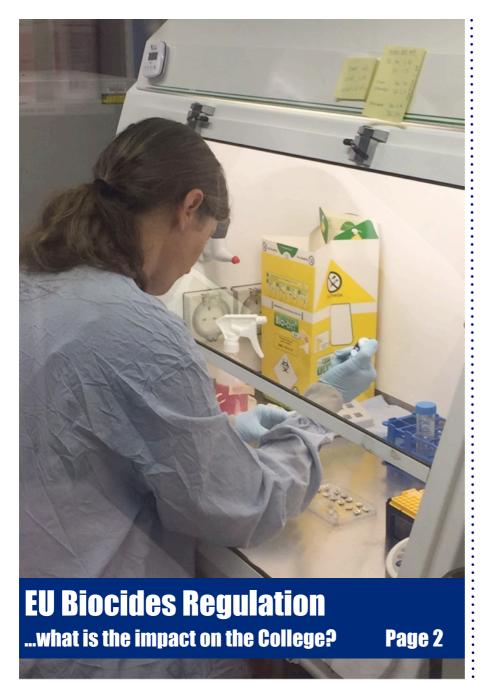
Imperial College London

Health and Safety Matters Tune 2016



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Access Health and Safety Matters in electronic format at: http://www.imperial.ac.uk/safety/safety-by-topic/health-and-safety-matters-/

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For some years now, the EU has been addressing issues of exposure to chemicals with a view to improving the protection of human health and the environment. They have done so (and are still doing so) via several pieces of legislation:

- REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals). European Regulation No 1907/2006, concerning chemicals and their safe use.
- CLP. European Regulation No 1272/2008 concerning the classification, labelling and packaging of chemicals.
- EU Biocides Regulation (Regulation 528/2012).

REACH and CLP have been discussed in previous issues of Health & Safety Matters (Issue 15, March 2009 and Issue 22, March 2010). In this issue, we look at the impact of the EU Biocides Regulation.

What is it?

The EU Biocides Regulation came into force on 1st September 2013. It regulates the placing on the market and the use of biocidal products. This covers a wide range of products, including the antibacterial wipes and sprays that you use in your kitchen and bathroom, the slug pellets in your garden, the wood preservative on the garden fence and.....the disinfectants you use in your laboratory. It specifically regulates the active substances in biocidal products. These active substances need to be approved before a biocidal product containing these can be authorised for production and use. Only those products that are registered and approved can be bought or used in the EU and they can only be used for their registered application (for instance household cleaning, animal husbandry, healthcare disinfection). For a product to be approved, the manufacturer will need to supply a dossier on the health and environmental hazards of its specific active substance and formulation. They will then be required to register the product type and its intended application. The deadline for registration of any products is 1st September 2016.

So what is the problem?

It will be illegal for end users to use a product that is not registered or use it in a manner that was not its registered application. We cannot stock-pile our favourite disinfectant and we cannot use products that are registered for the veterinary industry or as household cleaners or in our research laboratories. Not all manufacturers will want to go to the trouble of registering their products, especially if they cover a niche market. As a consequence, there will be fewer suppliers in the market and it is likely that the higher cost to suppliers and manufacturers will be passed on to the end users. Suppliers may swap unapproved ingredients for those that are approved without notifying the end user — possibly making your favourite disinfectant suddenly no longer effective for your purpose.

Any active substances that are classed as carcinogens; mutagens; persistent, bio accumulative and toxic, will not be approved and their use forbidden, unless the substance may be needed on the grounds of public health when no alternatives are available. In which case, an approval is granted for a maximum of five years.

What about our old ally formaldehyde?

Formaldehyde is registered for professional use (i.e. laboratories). It is classified under CLP as a Category 1b carcinogen (H350) and therefore only received a five year approval. It is due for review sometime after 2018. The 'word on the street' is that we'd better start looking for alternatives now. So one of our Biological Safety Officers, a former scientist at Imperial but long since having moved to the Safety Department, has been going back to her laboratory roots for the past few weeks testing out an alternative to formaldehyde fumigation on some of our toughest pathogens. A hydrogen peroxide micro-mist system has been put through its paces and the jury is out at the moment. More information will follow once the study has been completed.

Anything we need to do?

Keep calm and carry on. The HSE has a website (see below) that lists all approved substances - and those whose application is under review. Many suppliers have been unaware of the legislation. The Safety Department (in collaboration with other University H&S Departments) are currently working on this issue. We are checking with the suppliers of our preferred disinfectants to determine whether:

- they have registered all active ingredients
- · it is approved for our intended use
- they are confident they will be able to continue to supply it
- they are not changing the formula by stealth

HSE: Approved Biocides:

http://www.hse.gov.uk/biocides/eu-bpr/authorised-approved-biocides.htm

Are you a Grey Fleet Driver?

Read on.....

Following the recent launch of the College Policy and Code of Practice on Driving at Work, we look at the responsibilities of 'Grey Fleet' drivers. Here are a selection of Q&As....a more comprehensive set will be published in an information sheet in due course

- What is a Grey Fleet driver?
- You are a Grey Fleet driver if you have "volunteered" yourself and your vehicle for use for departmental purposes, or if you choose to use your vehicle to make a business-related journey.

.....

- What is the definition of 'employer's business?
 - The definition varies depending on the insurer, so it is important to check with your own insurance company. It depends on both where you are going and what you are using the vehicle for.
- Mow much will business use or occasional business use insurance cost me?
- Some insurers automatically add this to your insurance cover so you may already be covered; others charge a nominal sum (anything from £5-15 p.a.). Check with them.
- Is giving a lift to a colleague to our normal place of work likely to be classed as business use? Would they be covered under social, domestic and pleasure cover?
- Clarify with individual's insurance provider as the insurance cover provided and definitions vary between companies.
- I want to use my mobile phone in the car as a Sat Nav, but the College policy prohibits it. What can I do?
- You may use the Sat Nav facility, but not the phone, either as a hand-held or hands-free set. If you need to make or receive a call, you must pull over and park the car beforehand.
- My car insurance covers me only for my "usual place of work" What is my "usual place of work"?
- The usual place of work is one's normal campus. If visiting a different campus, this is not the usual place of work and business insurance cover may be needed. Individuals should check with their own insurers as policies vary.

If one is intending working for a few days, weeks or months on a different campus, different insurers may have differing interpretations on whether this constitutes the "usual work place".

- Do I need to undertake and record a driving risk assessment? I am going to an Away Day, less than two hour's drive or 120 miles away, and not carrying a hazardous load.
- No, the generic driving risk assessment is already done for short low risk journeys. Read through it, check the controls are in place (including route planning). You only need to do more if you are exceeding the time/distance limit, going abroad, or carrying something hazardous.
- I will be driving alone to an Away Day, and won't be returning home till late. Do I need to contact my line manager to let them know when I arrive at the venue and when I arrive home?
- Not for the venue, providing someone in the department has a list of attendees and when they are due to arrive. Ideally you should notify your line manager or their delegate of your safe arrival home (text message or email is ok), but this may not always be practical.
- Why do we need a Policy and Code of Practice anyway?
- There are several major pieces of UK legislation that apply and these were not previously being fully addressed. A gap had also been identified during several College audits. The College Insurers have focussed on the issue of driving at work and were particularly concerned about management of the Grey Fleet.

Driving at work is the most common cause of work-related death in the UKin past 3 years, 15,753 crashes occurred and 1 in 4 were work related. 800-1000 people are killed annually in work related road traffic accidents.

LEARNING FROM INCIDENTS

Leaning from incidents is an essential element of reactive safety management. As such, we plan to make this subject a regular feature of future editions of Health & Safety Matters as a means of publicising particular cases, and will attempt to focus on those issues that have College-wide implications. In this edition we look at two current topics.....falling maglocks on doors and injuries and ill health associated with using cryostats in the laboratory.

Example 1: Falling maglocks on doors

The issue: A number of incidents have been reported concerning the armatures on door 'maglocks' coming loose from their fixings causing them to fall. These have resulted in minor injuries or near misses. The risk arises from the fixing screws working loose due to vibration caused by continual opening and closing of the doors. This type of door lock is found extensively throughout the College as part of the access control system. The armature fixed to the door connects with a magnet on the frame and the mechanism releases when activated by an authorised swipe card.

Learning outcomes:

- The College has a technical specification for the procurement and fitting of maglocks. This specification stipulates that threadlock compound must be applied to the fixing screws on the armature upon installation to prevent them working loose. The risk was therefore recognised and mitigation measures devised at the outset.
- 2. Estates also have a planned preventative maintenance (PPM) programme in place for checking the functionality of all maglocks, ensuring that the door closer operates as intended and checking that fixings are secure at the time of inspection. Therefore there was also a proactive mechanism for monitoring and correcting issues.
- 3. In response to the reported incidents, a random inspection of maglocks was carried out. Though the sample number was small, it was determined that around 70% of those inspected had not had threadlock applied. It was therefore apparent that the above specification was not being robustly implemented.
- 4. All maglocks are now being inspected and threadlock compound is being applied in cases where it is absent. There are over 3000 maglocks at South Kensington Campus alone, so the activity will take a while to complete.
- 5. The PPM specification is being expanded to include the application of a different coloured threadlock each year. This will aid auditing and provide a means of visually dating the application.
- 6. In the event that problems continue, the type and manufacturer of the locks will be reviewed.

Example 2: Cryostats - avoiding injury and ill health

The issue: In simple terms, cryostats are items of laboratory equipment that enable samples of tissue to be maintained at very low temperatures whilst taking very fine slices using a sharp blade. There are numerous instruments of this type being used in the College, particularly within the Faculty of Medicine. We periodically receive accident reports relating to the use of these instruments - most commonly cuts to the fingers. Two accidents have been reported so far this year, one serious enough to be reportable to the HSE under RIDDOR. Operation of these instruments can also give rise to ergonomic problems since the actions are typically repetitive.

Learning outcomes:

- Guidance on risk reduction has been available on the Safety Department website since 2007. This should be publicised or re-publicised in areas where such instruments are used: https://www.imperial.ac.uk/pls/portallive/docs/1/245 71696.PDF.
- Guidance focussing on ergonomic issues is also available on the Occupational health service website: <a href="http://www.imperial.ac.uk/occupational-health/h
 - h-protection-at-work/lab-ergonomics/cryostat/.
- 3. Keep abreast of advancing technology. Such instruments are not an everyday purchase but automated cryostats or those with better ergonomic design are likely to continue to appear on the market.
- Manage the time spent working on cryostats carefully - avoid long stints of continuous work. Take sufficient breaks.
- 5. Report any symptoms of arm or shoulder problems promptly so that assessment by Occupational Health can be arranged.
- 6. Take particular care when cleaning or changing blades.
- 7. Wear appropriate PPE where possible to reduce the risk of cuts and effects of the cold conditions.
- 8. Be aware of first aid arrangements for cuts or cold burns.
- Ensure that users receive appropriate training and that risk assessments are recorded and reviewed.

News Snippets

Farewell.....

lan Smith, the Safety Department's Health & Safety Technician, left the College in January after nearly five years in the role. Ian was a popular member of staff who developed close working relationships with many people in the College. He has moved to Devon and has joined Vent-Tech Ltd, an LEV company based in the West Country. We wish him well with his new venture and will be welcoming him back to the College to undertake a one-day training session for our new staff soon.

Welcome.....



Matt Moderate joined the Safety Department in April as the replacement for lan Smith. Matt has an aeronautical engineering background and joins us from the Cambridge based Marshall Aerospace and Defence Group where he worked as Aircraft a n Maintenance Engineer.

His job included working in the confined spaces of fuel tanks where health and safety was obviously a clear priority. Matt has now moved to London and is looking forward to getting to grips with the role of Health & Safety Technician at Imperial.



staff here at the College.

Nuala Kearney joined the College Occupational Health Service as a Clinic Nurse in May. Nuala was previously employed as a Practice Nurse in the Occupational Health Department at Kings College Hospital and looks forward to promoting and supporting the health and wellbeing of the

Provost's Awards for Excellence in Health and Safety

The 2016 Provost's Awards for Excellence in Health and Safety were presented at a gathering held in 58 Prince's Gate on 27 April. Professor James Stirling presented the following Award Certificates:



Professor Phil Parsons

The Individual
Award went to
Professor Phil
Parsons of the
C he mistry
Department.
Professor Parsons
was commended for
his dedication to
promoting a positive
attitude towards
health and safety in
research and teaching
laboratories. This

included the development of a practical laboratory safety course for chemistry students and supporting the training of a new Faculty Safety Officer.

The **Group Award** went to the Health and Safety Champions in Professor Zoltan Takat's Group of the Division of Computational and Systems Medicine for their outstanding work in developing a health and safety management system. The team comprises: Dr. Frankie Bolt (Research Associate), Adam Burke (Research Technician), Dr. Louise Gildea (Research Associate), Dr. Varena Horneffer-van der Sluis (MS Research Coordinator), Anna Mroz (Research Technician), Pamela Pruski (Research Postgraduate) and Dr. Phyllis Quinn (Research Manager).



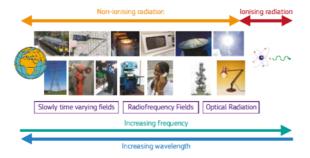
Professor Stirling with members of the winning team

A full report can be found under College and Campus News:

http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_3-5-2016-10-27-27

The Electromagnetic Field (EMF) Regulations

In July 2016 new regulations will be implemented in the UK relating to workplace exposure to Electromagnetic Fields (EMFs). While it is likely that the impact of these regulations within the College will be minimal, it is essential that any potential EMF sources are identified and assessed to ensure the safety and wellbeing of College employees. A guide has been published by the European Union (Non-binding guide to good practice for implementing Directive 2013/35/EU) and can be referred to for more detailed information than is provided here.



What are EMFs?

Electromagnetic fields (EMFs) arise whenever electrical energy is used. In the industrial or workshop environment, processes such as radiofrequency heating and drying may produce strong EMFs, while in medical world applications such as diathermy and Magnetic Resonance Imaging (MRI) may be of concern. It is notable, however, that MRI workers are specifically exempt from the EMF Regulations. In the wider world, sources include radio, TV and Telecoms broadcasting transmitters and security detection devices.

What are their effects?

It has been known for a long time that exposure of people to high levels of EMFs can give rise to acute effects. The effects that can occur depend on the frequency of the radiation. At low frequencies the effects will be on the central nervous system of the body whilst at high frequencies, heating effects can occur, leading to a rise in body temperature. In reality, these effects are extremely rare and will not occur in most day-to-day work situations. One group of workers at particular risk are those wearing active implanted medical devices (AIMD). This is because strong electromagnetic fields may interfere with the normal operation of these active implants.

What do you need to do?

If you have equipment that may give rise to significant EMFs, or you are uncertain, you should contact your local safety officer or the College Safety Department. The College Safety Department is equipped with EMF monitoring equipment and will be able to carry out an EMF survey and assist with assessment of any workplace EMF risks.



As part of its role in assisting with the emergency evacuation of buildings, the Fire Office, along with the Equality Diversity and Inclusion Centre and Occupational Health, have developed a number of templates to assist departments to fulfill their obligation to identify and make arrangements for people who may not be able to respond to a fire alarm - either due to mobility issues, hearing / visual impairments or ill health. Having a plan in place will assist the speedy evacuation of all building occupants to a place of safety.

Should an alarm be triggered, most people will be aware of the fact and make their way unaided to a place of final safety. For some however, it may not be so straightforward and additional assistance may be required. It is important to note that the need for alternative arrangements may not be as a result of a visible disability.

A PEEP is a Personal Emergency Egress Plan developed jointly between an individual, their supervisor / line manager, or a nominated person within a department which will enable them to safely exit the building during an emergency. Residential Services staff provide support with PEEPs in halls of residence. Development of the plan may also require advice from the Fire Office, Occupational Health and / or the Disability Advisor. Templates for PEEPs can be found on the Estates Facilities web page under the fire safety section. These templates are supported with guidance on completion together with worked examples. The Fire Office will be able to advise on the arrangements for particular buildings and the use of evacuation equipment. HR forms have been amended to trigger enquiry on the need for alternative arrangements for new starters and those returning to work after absence.

For further information, visit:

http://www.imperial.ac.uk/estates-facilities/health-and-safety/fire-safety/peeps/



The College is working towards implementing a single emergency telephone number that can be used across most campuses (the exceptions being Royal Brompton and Northwick Park, where existing arrangements will remain in force). The single number will be the 4444 number that many people based at the South Kensington campus will already be familiar with.

Testing has already been carried out and a go-live date will be agreed with Security shortly. The existing emergency contacts page on the Security website will also be updated. The new number will be also publicised by other means and stakeholders such as Human Resources and the Student Union will be notified to enable them to update their induction packs etc. The 020 589 1000 will still remain for receipt of emergency calls from mobile phones.

Security emergency contacts page:

http://www.imperial.ac.uk/estates-facilities/about-us/campus-emergency-contacts/

ISTR AGM and Summer Symposium 2016

The Institute of Safety in Technology and Research, of which many of the College safety professionals have membership, is holding its annual Summer Symposium on 5th. and 6th. July at Cardiff University. The theme this year is: Fire: a new look at an old enemy. Discussion will revolve around fire risk assessment and prevention in research environments, fire safety management in modern buildings, fire systems maintenance and strategies for gaining buy-in for fire prevention measures from budget holders. Adrian Dorrington, the College Chief Fire Officer, will be delivering a talk entitled: Fume hood fires - selling prevention strategies to the financiers.

Safety Department on Twitter



The Safety Department has operated a Twitter account for some time. The live feed can now be viewed on the front page of the Safety Department website. Matt Moderate has taken over managing the account and posting the tweets.

....@ICLSafety



What health and safety considerations are relevant if I wish to work from home?

The College, as an employer, has a duty to protect the health, safety and welfare of all its employees irrespective or where they may be working. This will include those working from home.

Home working is not usually considered to be a normal or full-time arrangement. It can however, be beneficial in certain circumstances, for example when there are predicted transport difficulties or child care issues. Coming to an agreement to work at home will vary according to the seniority of the staff member, but permission will normally need to be sought from the line manager. The type of work sanctioned will typically be computer based office-type tasks.

College-owned equipment will be covered by the College insurance policy, but it should be noted that the excess is usually high, so in reality there may be little cover at all unless a claim could be made under the home owner's own contents insurance (assuming it exists). All reasonable steps should be taken to ensure the security of College equipment. Any College electrical equipment must be subject to portable appliance testing (PAT) on College premises. Electrical sockets and other parts of the home workers domestic supply are not the responsibility of the College. Aside from electrical safety, the biggest risks are likely to relate to poor workstation ergonomics. The workstation should be subject to self-assessment in a similar way that a workstation on College premises would be (if necessary, with guidance from departmental safety staff). It is not usually practicable nor necessary for the person's home to be visited.

Any accidents or ill health relating to work tasks carried out in the home should be reported in the same way as if they occurred on College premises.

This is a condensed summary of the guidance on Home Working available on the Safety Department website: http://www.imperial.ac.uk/safety/safety-by-to-pic/home-working/

Safety Training



LDC Safety Training reported to the Health and Safety Consultative Committee on 27 April 2016 noting that 5124 participants have accessed over 38 separate courses, both classroom and e-learning through central safety provision from Jan - Dec 2015. This includes staff, postgraduates, contractor partners and external attendees but does not take into account departments who have organised or accessed local training directly. This does represent an increase from 2014 of 4930 participants.

There is increasing use of e-learning, building on the success of Intro to Laser Safety with 453 participants. This is supplemented by classroom based Ensuring Laser Safety for Departmental Laser Safety Officers (DLSOs), Group Supervisors and PIs supervising 3R, 3B and 4 Lasers. The LDC will also fund Public Health England (PHE) Laser Safety Management course based on College need.

The e-learning Fire Safety and Awareness training was accessed by 657 participants in 2015. This is supported by the Fire Office with pro-active interventions and delivering classroom sessions with special emphasis on high risk environments. This is aimed at specific groups such as Chemists, Physicists and staff and researchers working with unique hazards requiring non-standard fire protection measures.

It was agreed at the Consultative Committee that Safety Training Advisory Committee (STAC) will evolve into Health & Safety Training Implementation Committee (HSTIC) moving from an advisory committee to decision making and implementation committee. The remit of HSTIC is to gather and collate information regarding safety training and development need. This will help the HSTIC formulate priorities and allocate responsibility for central or local provision and ensure legal compliance with College Policy and Codes of Practice.

Central to this is promoting a strategic vision for safety which supports the College's target of excellence through the provision of high quality training to develop demonstrable competence of the highest standard. As well as enhancing technical skills, this approach will foster positive attitudes to health and safety demonstrated by proactive awareness and a desire to manage risk by using HSG 65 (amended) Managing for Health and Safety model: **Plan**; **Do**; **Check**; **Act**.

Overview of first aid provision 2015

| Course Title | Sessions | Delegates |
|--|----------|-----------|
| Emergency First Aid at Work (1 day) | 16 | 183 |
| First Aid at Work +AED (3 days) | 5 | 54 |
| First Aid at Work + AED Requalification (2 days) | 6 | 35 |
| First Aid Refresher + AED (half day) | 6 | 38 |
| Fieldwork First Aid (2 day) | 3 | 29 |
| Paediatric First Aid (EYEC) (2 days) | 3 | 36 |

Contact Details

Occupational Health Service

Level 4

Sherfield Building South Kensington London SW7 2AZ

Telephone: 020 7594 9401 E-mail:

occhealth@imperial.ac.uk

Website:

www3.imperial.ac.uk/ occhealth

Safety Department

Level 4

Sherfield Building South Kensington London SW7 2AZ

Telephone: 020 7594 9423

E-mail:

safetydept@imperial.ac.uk Website:

www3.imperial.ac.uk/ safety

If you have any comments or suggestions for inclusion in the Newsletter, please contact the editor:

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