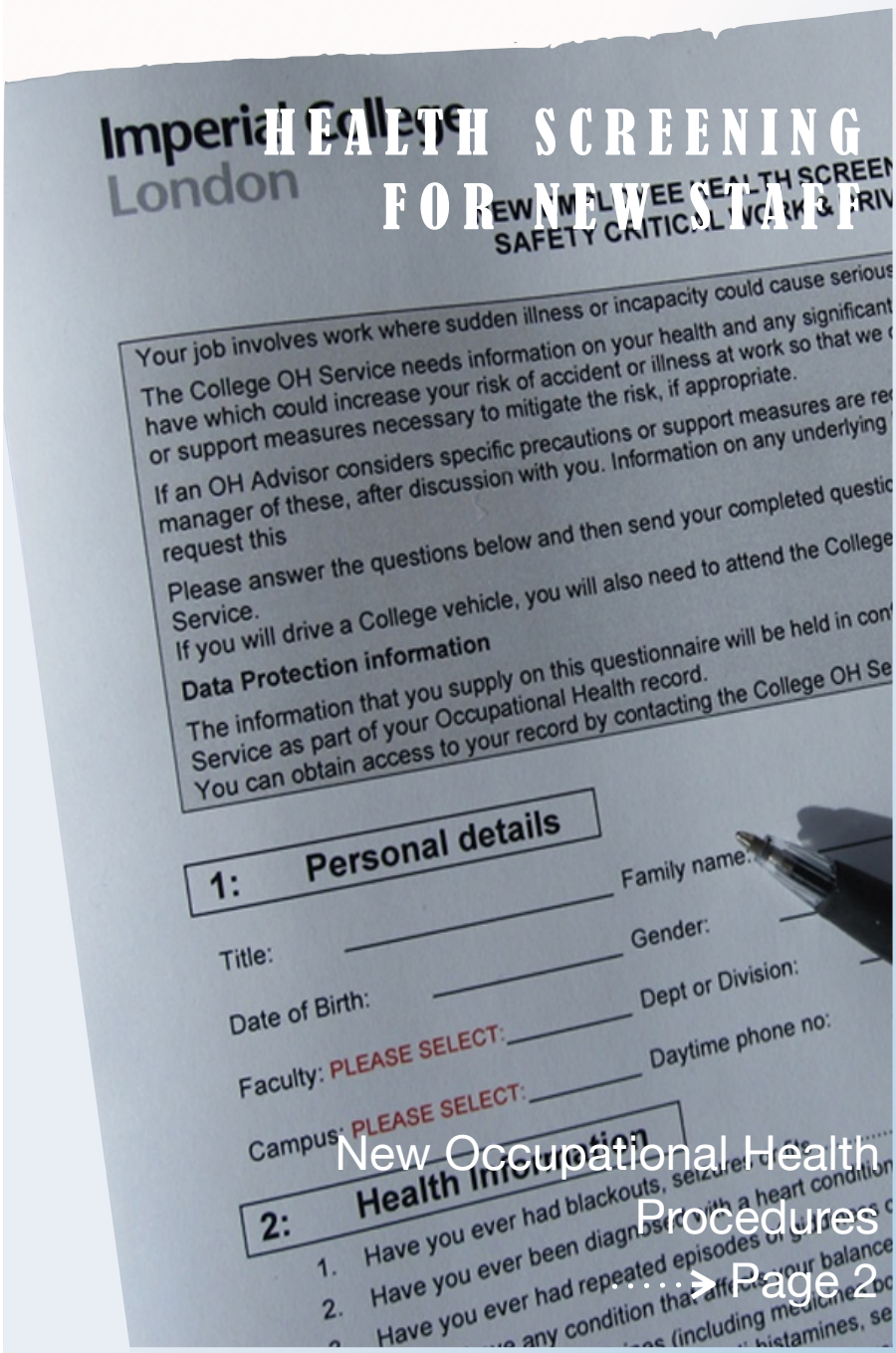
Imperial College London

Health and Safety Matters

September 2011



New Occupational Health Procedures

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Access Health and Safety Matters in electronic format at :
http://www3.imperial.ac.uk/safety/subjects/newsletter

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Changes to health screening for new staff

Generic health screening of all new members of staff will end this month. From now onwards only new staff who will be involved in intrinsically hazardous work will be screened. The method used to screen new staff recruited into jobs for which a health assessment is still required will also change. Rather than using a standard 'catch-all' questionnaire, these staff will be screened using questionnaires specific to type of work they will do.

Most academic, research and laboratory or workshop-based support will still be screened. Most administrative and office-based support staff will not. Types of work for which screening will continue is shown in the box.

JOBS REQUIRING HEALTH SCREENING

a. Contact with patients or young children
b. Work with laboratory animals*
c. Laboratory work with Hazard Group 2 or 3 human pathogens, Class 2 or higher GMOs, unscreened human blood or tissue*
d. Other work requiring health surveillance
e. Safety-critical work
f. Driving College vehicles
g. Travel to tropical countries*
h. Food handling
i. Security work

**Screening will occur at start of specific work rather than start of employment*

New staff who need screened will be picked up through the Contract Request form. This now includes a Health Evaluation section, equivalent to the Job Information Section of the old Employment Health Assessment questionnaire, for the manager to indicate whether or not the person will be involved in work for which screening is still required.

Once a Contract Request form is received by Human Resources, the information from the Health Evaluation section will be passed on to Occupational Health. OH will then contact the person to arrange an assessment. In most instances, the assessment will be questionnaire-based, followed by a clinic attendance only if necessary e.g. for vaccination or to enrol for health surveillance or if a more detailed assessment of a health problem declared on the questionnaire is required. The outcome will be notified to the new member of staff and the local HR team.

Some assessments will be delayed until the person is about to start the specific work for which screening is needed as information to properly assess health risks may not be available when the person first starts work. OH however, will still contact the person when they first start work to provide information on how and when to get screened.

The changes are being introduced to make screening easier, quicker & more efficient. The likelihood of someone recruited to work in an office-based job having a health problem that could cause difficulties for them in their work is so small that it is not worth screening them. The OH Service can now concentrate on identifying those staff who need an OH service, such as vaccinations or health surveillance to help protect them from health risks in their work. The new procedure has already been successfully piloted in the Faculty of Medicine

Safety critical work

This is a new category used in the health evaluation of new staff. It is defined as work where sudden illness or incapacity might pose serious risk of harm to an individual or others. Jobs which require a person to drive, operate machinery or heavy lifting equipment, work at height, or direct handling of chemicals posing a risk of significant injury or harm to health if spilt should be classed as safety-critical. Most laboratory or workshop-based jobs should be classed as safety-critical. Where someone being screened for safety critical work discloses a problem which may impair their or other's safety, OH will consider and advise on support measures to mitigate the risk whilst allowing the person to do their job.

Disability support

Ending universal screening for all new staff will mean that new disabled staff lose an opportunity to disclose a disability for which some specific support measures may be needed. The personal details form that all new staff have to complete to set up salary payments now has a question inviting disclosure of a disability for which support may be needed. Following a disclosure an HR adviser will assist the manager and new member of staff sort out the specific support measures needed, involving OH if necessary.

Occupational Health Services for postgraduate students

The Occupational Health Service recently issued a reminder to Deans of Postgraduate Studies to advise on the arrangements for OH support for new postgraduate students coming to College this autumn. Deans have been requested to cascade the information to MSc Course Organisers, PhD Supervisors and PIs supervising MSc students during project work for their dissertation.

In summary, the College OH Service provides the same clinical services to taught and research postgraduates as is provided for staff. However, students do not go through employment health screening so OH are unaware of students who need vaccinations, health clearance or health surveillance unless they make contact. Course organisers or supervisors need to instruct new students needing these services to contact the College OH service.

The reminder that was issued covered specific issues such as:

- *health clearance for work with pathogens, GMOs and unfixed human tissue*
- *health surveillance for work with laboratory animals*
- *health clearance for those who will have contact with patients in a clinical setting*
- *health clearance for travel abroad for the purposes of study or research*
- *procedures for emergency assessment and treatment of laboratory accidents*

As always, further advice and information may be obtained from the College OH Service.

Media Mention: the alternative life of a BioRisk Manager

An article appeared in the Daily Mail on 28 July describing how Dr. Anton de Paiva, our own intrepid BioRisk Manager, embarked upon an exercise to take swabs from various locations in the home of a journalist to determine where potentially harmful microorganisms may be lurking. The swabs were subsequently sent for laboratory analysis.

Dr Dirt was soon going about his business and horrifying his host with advice about the 'nasties' that may be colonising the dishwasher seal and shamelessly promoting commercial products that can be used to remove moulds and limescale. Aside from the more obvious culprits such as used dishcloths, the contents of the toy box came under particular scrutiny. 'These could be responsible for regularly spreading germs from one child to another,' he said. 'Toys are a fomite — meaning an inanimate object which is capable of carrying infectious organisms. In paediatric units, toys are responsible for the biggest transfer of germs, so hospitals have to have a stringent cleaning and disposal policy'. AdeP advised a stringent cleaning regime for toys but stopped short of obtaining a quote for an autoclave. The bath mat, baby's car seat and perhaps predictably, door handles, also received his attention - the general advice being that there is no substitute for simple good hygiene rather than the application of aggressive chemical products. His understanding of the COSHH hierarchy no doubt further impressed his host. The full online article can currently be found on the Daily Mail website: http://www.dailymail.co.uk/femail/article-2019527/Will-dishwasher-food-poisoning.html#ixzz1TOGWiBUz. We thought that he was on holiday.

X-Ray Diffraction Equipment.....
do you have the right instrument for monitoring?

The majority of X-ray diffraction equipment at the College utilise continuous spectrum X-ray tubes with copper (Cu) or molybdenum (Mo) target materials. This means that the characteristic kα-X-rays produced have a wavelength of 1.54 Ångströms for copper and 0.71 Ångströms for molybdenum. Thus the effective energy for each of these wavelengths is 8keV for copper and 17.4 keV for molybdenum.

The kα X-ray wavelengths are generally more dominant for X-ray leakage and so radiation monitors must have a good energy response to these effective energies to conduct suitable radiation monitoring.

Which radiation monitors are suitable?

Mini 5.10/900 Type X

- Analogue scale 0 to 2000 counts per second (CPS).
- Uses an end window Geiger–Müller tube (GM) without energy compensation.
- Sensitive to radiation photons down to 8keV.
- Useful for locating narrow beam X-ray leakage.
- GM tube detection is very directional.
- Not intended for dose rate measurement but as a count rate relative safety check device for crystallography equipment.

Mini 5.40/900 44B

- Analogue scale 0 to 5000 counts per second (CPS).
- Uses a sodium iodide crystal with a photon-multiplier tube.
- Beryllium window gives the scintillation detector an energy range down to 5keV. (Fe-55 check sources are recommended for crystal resolution).
- Good sensitivity useful for detection of low energy X-ray leakage through gaps in X-ray set shielding.
- Cannot pin-point narrow X-ray beams due to increased sensitivity.
- Not intended for dose rate measurement but as count rate relative safety check devices for general X-ray equipment.

Mini 900 D H*(10)

- Analogue scale of 0 to 1000μSvh^{-1} dose rate.
- Uses end window energy compensated GM tube with an aluminum filter inside the plastic cap that acts part of the detector to provide ambient dose equivalent measurement relative to 1cm tissue.
- Good flat energy range from 30keV to 1.3MeV but can detect down to 17.4keV photons.
- Not suitable for photon energy below 15keV or measurements from X-ray equipment operating above 45kV due to small dose rate range.
- Not intended to be used without the plastic end cap and is for health physics monitoring of the designated area around the X-ray equipment.

2011 Changes to the regulations governing the import of animal products

On 23 March 2011 the new Animal By-Products (Enforcement) (England) Regulations No.2011/881 came into force. These Regulations enforce the requirements of the new EU Animal By-Products Regulation 1069/2009 (ABPR), and EU implementing regulation 142/2011, which came into force on 4 March 2011.

An animal product or animal by-product means anything originating or made (whether in whole or in part) from a living or dead animal that is not intended for human consumption. This includes: tissue or cell cultures, antibodies or cell cultures in medium containing BSA, FCS, bodily fluids (including blood), feathers/hides, and manure.

Regime. The Research Licensing Regime provides general licenses/authorisations which you can download from the DEFRA website. The Research Licensing Regime has specific conditions for its use and only certain products are covered under these licences. If you plan to use a General Licence or Authorisation you must let the Safety Department know that you intend to do so and the details of the licence to be used.

For any Animal-by-Products that are not covered under the Research Licensing Regime, you must supply an application for an Animal Health Import Licence using the DEFRA IAPPPO1 and its supplementary forms to the Safety Department.

It isn't always clear whether research samples contain animal by products, for instance if a collaborator sends you some samples that are stored in media with FCS, you will need to comply with these regulations and you will require a licence.

Below is a summary of the different type of licences that you might require under the new law:

Import of Animal Products that are unlikely to be infected with an Animal Pathogen

If you order animal-by-products known not to be infected or have good reason to expect that they are not infected with an animal pathogen, from a reputable company with a distribution centre in the UK, it is unlikely that you will need to apply for a licence, but you should double-check this with the supplier.

If you wish to import, other than from a reputable company, any animal-by-products from within the EU (or certain Third countries), you can probably import the product under the Research Licensing

Import or Possession of an Animal Pathogen

If you wish to import an animal pathogen or a carrier, or hold a specified animal pathogen, even if the pathogen has been made non-infectious, then you will need to apply for a specific licence under Import of Animal Pathogens Order and Specified Animal Pathogens Order. Contact the Safety Department for further advice.

The guidance on the Safety Department web pages has been updated to reflect the changes (http://www3.imperial.ac.uk/safety/subjects/biosafety/animal%20products). The regulations will continue to change - please check regularly for any further updates.

Safety Department and Occupational Health Service News

Welcome....

Tom Digby, Occupational Health Technician joined the Occupational health team in April. Tom has a background in Biochemistry and is supporting delivery of Well Persons Screening and Health Surveillance in addition to administering the medical student health screening and vaccination programme. He has undertaken Display Screen Assessors training and is the DSE Assessor for Human Resources.

Safety Department Relocation

The Safety Department relocated to Level 4, Sherfield Building on 11 August and we are now adjacent to our colleagues in the Occupational Health Service. We have updated our details on the website. Visitors are best advised to the lifts or stairs at the western end of Sherfield to reach level 4, turn left and left again and go through the door past ICT. The Safety Department is located about half way down on the south side of the building.

Lab Accident Guidance now available in poster form

The guidance on obtaining medical assistance following a hazardous laboratory exposure that has been available in ring-bound booklet form is now available in poster format courtesy of Severine Toson from the Chemical Engineering Department. The emergency contact information in the poster can be customised for each campus and is available from the OH Service.

New LAA web pages

The OH Service has posted updated guidance on controlling laboratory animal allergy on its

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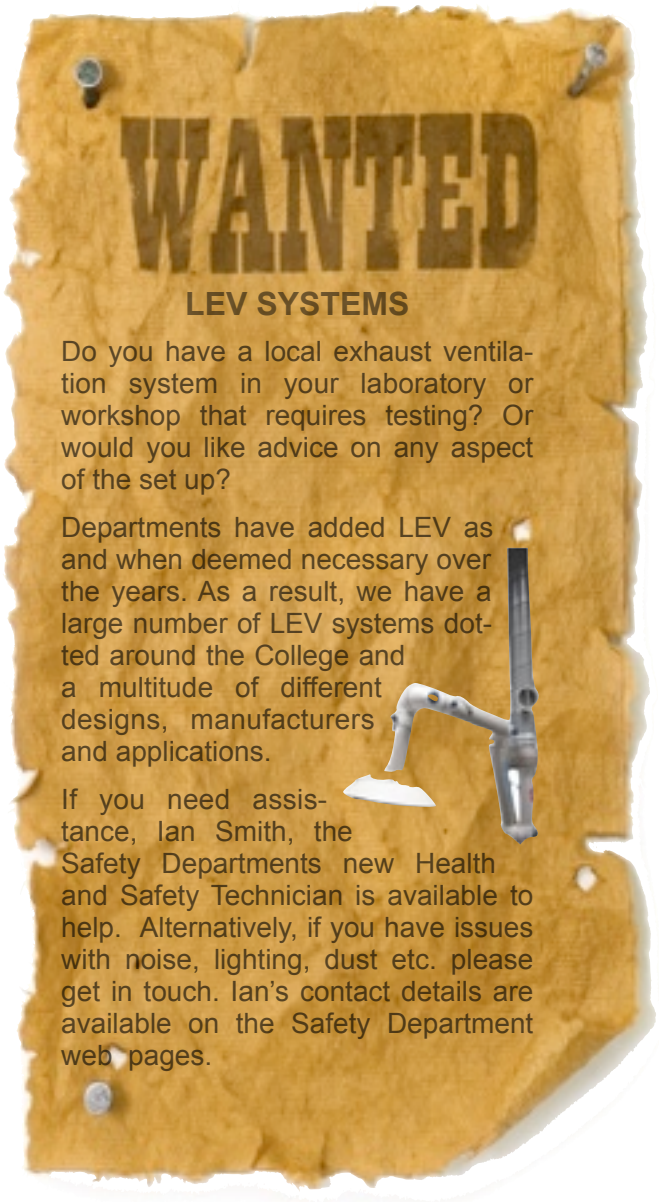
web pages. The general *SOP for Work with Animals* has been updated to reflect changes in use of containment and dust masks and has been re-titled to *Working Safely with Laboratory Animals.* The checklist for carrying out annual inspections of departmental laboratories has been made available for download by safety officers. Other related guidance notes and codes of practice have also been reviewed and revised in line with the recommendations of the audit of designated labs two years ago.

The new web pages can be found at: www.imperial.ac.uk/occhealth/guidanceandadvice/laboratoryanimalallergy



FREQUENTLY ASKED QUESTION

I need to order a Schedule 3 Controlled Drug - the supplier has advised that I need a license - is this correct?

We have received a number of enquiries of this nature recently.

Production, supply and possession of Controlled Drugs is regulated by the Misuse of Drugs Regulations 2001. Drugs that are controlled under these regulations are grouped into Schedules (1 to 5) and this categorisation determines which provisions apply. Like all regulations, these regulations can be difficult to penetrate and extract relevant information—and unlike most regulations published by the HSE, do not have supporting guidance to assist in interpretation. In short, university departments do not require a license to possess and supply drugs in Schedules 2 to 5 (but they do for producing drugs in these Schedules). The exact wording in the Regulations with respect to exemption for possession and supply for universities is:

'a person who is in charge of a laboratory the recognised activities of which consist in, or include, the conduct of scientific education or research and which is attached to a university, university college or such a hospital as aforesaid or to any other institution approved for the purpose under this sub-paragraph by the Secretary of State' (Schedules 2 and 5)

and…

'a person in charge of a laboratory the recognised activities of which consist in, or include, the conduct of scientific education or research' (Schedules 3 and 4)

Commercial suppliers are not always familiar with the regulations or exemptions and often use standardised documentation that can confuse all concerned. We sometimes need to challenge them and we would advise that anyone having problems with suppliers refusing to provide drugs in Schedules 2 to 5 without evidence of a license to contact the Safety Department and we will advise which part of the Regulations to quote and you should get your material delivered.

Acquisition of Schedule 1 drugs does require a license to be in place. We have little experience of this in the College but it has the potential to open up a whole world of hurt—delays (minimum of 12 weeks to process applications); fees (currently £3133 for possession); Criminal Records Bureau (CRB) checks for named applicants; likely visits from a Home Office Compliance Officer (and possibly the police) - it would probably be simpler to change the direction of research to avoid having to acquire them.

Accidents, Near Misses, Occupational Ill Health.....

Online incident reporting system update..

We are targeting the start of the new academic year for the launch of the new online accident reporting system. The system will be known within the College as SALUS - from the Roman goddess that represented the personification of well-being - and will be accessed via a link on the Safety Department website. We are currently still configuring the system and are in the process of compiling training and guidance documents that will be accessible from within the system. These will mainly be aimed at FSMs, CSMs and DSOs who are involved in the investigation process and data compiling. No training will be required for those who simply wish to report an incident via the system. We will probably run a longer article on SALUS in the next issue of *Health and Safety Matters* and we will decide on how to report incident summaries in future editions of the newsletter once the new system is up and running.

Brief incident summary..

- We have reported 17 accidents in accordance with RIDDOR so far this calendar year. If the trend continues, we will exceed the number of RIDDORs reported in 2010. Accident types have been varied but have included some unpleasant chemical exposures.
- Some recent incidents have been very minor in nature - paper cuts, injured by a pencil! and hot water scalds whilst making tea and coffee. We have also received a number of reports of incidents involving visiting students. Overall, this indicates a high level of reporting, which is encouraging.
- In July, a fire occurred in a chiller unit in the RSM Quadrangle at South Kensington. This was dealt with by the College Fire Officers and a large turnout from the Fire Brigade ensued. Nobody was injured but disruption occurred due to a number of buildings being evacuated.

Safety Training

The safety training programme is now online and you can view the full range of courses at http://www3.imperial.ac.uk/staffdevelopment/safety/index .
We will continue to ask departments for a contribution towards the cost of some training courses but whatever income is raised will be spent on the wider safety programme. All the mandatory courses will remain cost free as will all our First Aid courses. Where possible, we have removed charges on some courses and reduced fees on others. We have had to increase the NEBOSH National General Certificate fee to reflect the increased cost of registration, materials and catering to £400 for internal delegates. The external fee will remain £1500.

There are still ongoing negotiations with several training providers and agreements need to be drawn up and contracts signed so the programme is continually evolving. We will have most things in place before the start of term. For some specialist courses where there is limited demand like Portable Appliance Testing, it may be more cost effective to ask delegates to infill on existing course offsite. We will continue to work with training providers that will offer us cost effective training and look to establish new relationships with others. We are looking at a Gas Safety refresher course for those delegates that have completed the E-Learning workshops and attended the practical courses.

We are revisiting E-Learning to see how we can build on the existing subject areas: Gas Safety; Month One Safety Training (MOST); Risk Assessment Foundation Training (RAFT). Due to a lack of funds we have taken a rather ad-hoc approach. We have come across problems with previous packages like purchasing codes per user, licensing issues, authoring and editing rights. The consensus is that for any long term solution, we need to develop this capability using our own resources.

We are looking at various software tools that can efficiently design and create E-Learning, give us authoring and editing rights, use existing power-point/ word content for ease of use, speed of creating/ updating and create assessments including randomisation. Another consideration is that the software needs to be disability enabled and SCORM compliant so that it can work with our existing Oracle Learning Management System (OLMS). In order to achieve this, the Learning Development Centre needs to access the knowledge network from specialists within Safety Department, Occupational Health, Fire Office and ICT. This will mean bringing together various individuals with information who will interact with each other to amplify and develop new ideas.

Any perceived benefits of E-Learning need to be balanced with concerns about the loss of face-to-face contact with personnel including the Safety Director, RPOs and BSOs. There are also technological concerns about ease of access, interface with existing systems especially after upgrades, the level of resource needed to resolve technical faults and competency test failures. Finally, the whole life cost of any system needs be considered.

training schedule

Below is a selection of forthcoming courses. For the entire range, visit: http://www3.imperial.ac.uk/staffdevelopment/safety/index#

Fieldwork First Aid (South Kensington)	Sept 19th–20th	Biological Safety Foundation Training (H'Smith)	Oct 21st
H&S Responsibilities for Academic Supervisors (H'smith)	Sept 21st	Centrifugation (South Kensington)	Oct 17th
Introduction to Laser Safety (H'Smith)	Sept 21st	Gas Safety (South Kensington)	Oct 19th
Asbestos Awareness (South Kensington)	Sept 27th	Principles of Radiation Protection (South Kensington)	Oct 19th

Contact Details

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

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