

**MUSEUM OF THE ROYAL PHARMACEUTICAL SOCIETY OF GREAT BRITAIN**  
**1 Lambeth High Street, London SE1 7JN**

## **Historic Pharmacy Collections: Care and Safety Issues**

The information sheet covers the following issues:

- A) Safe handling guidelines for historic medicines.
- B) Legal issues connected to holding historic pharmaceutical collections, and the role of the Royal Pharmaceutical Society's Fitness to Practise and Legal Affairs Directorate and other bodies in assisting with this.
- C) Disposal of potentially harmful medicines/chemicals.
- D) Safe display/storage guidelines for historic medicines.
- E) Source list and contact list for further information.

NOTE: The term medicines encompasses all medical preparations – liquid, powder, tablet/pill form, ointments, etc

### **A) Safe Handling of Historic Pharmacy Collections**

The list of handling guidelines given below is not intended to be comprehensive, but aims to provide a set of useful pointers for the handling of historic medicines. You should contact your Health and Safety Officer for detailed information. Be aware that COSHH (Control of Substances Hazardous to Health) regulations cover many substances held in historic pharmaceutical collections.

If you are unsure whether a medicine is potentially harmful, it is always advisable to be cautious. As a minimum precaution, wear surgical plastic gloves when handling pharmaceutical containers if it is likely or you are uncertain whether the contents could be harmful. Remember that the outside of a container could also be contaminated by drips or other deposits.

List of handling guidelines:

1. *Wear protective clothing* – plastic surgical gloves (see above) are a minimum requirement, and afford better protection than cotton gloves. If working with an *in situ* collection (eg clearing a pharmacy store) wear overalls and stout shoes, and if you think there is any danger of inhalation, a face mask.
2. *Minimise exposure to any harmful medicines/substances* – do not open and sniff the contents of containers, especially if unlabelled (they could contain poisonous or other harmful substances). Do not touch eyes or mouth after handling medicines. Do not work in confined areas, as organic solvents and other chemicals may emit toxic fumes (preferably work in a well ventilated space/ open a window, or take a fresh air break.) Always wash your hands after handling historic medicines.
3. *Beware of the hazards presented by containers* – fluted, ribbed or coloured bottles may contain poisonous substances/medicines for external use only, so treat with caution. Be very wary of unlabelled containers, they could contain poisons. Paper bags/packages, commonly used to store medicines should be handled carefully as they may be weakened by holes/damp/pest attack. Bottles containing viscous medical syrups can stick to shelves, so be careful when picking them up as you may bring the shelf down.
4. *Transport containers safely* – always pack medicines properly in boxes with appropriate padding. Be particularly careful with liquids in breakable containers; keep upright, no matter how well sealed they appear, and place in polyethene bags to prevent spillage.
5. *Do not eat, drink or smoke whilst handling historic medicines.*
6. *If you are pregnant* – Do not handle any historic medicines, even with gloves; seek advice from your Health and Safety Officer, who should undertake a risk assessment for you.

**Remember – if worried by physical contact with a substance, seek medical advice immediately, and if possible note the details on the label of the container to aid treatment.**

Note that pharmaceutical collections may also include vaccines containing biological agents and pure chemicals used to make medicines or for other purposes in the pharmacy. These substances should be handled with the same caution as medicines themselves. Additionally, be aware that radioactive material was sometimes used for medical treatment until its adverse effects were identified. This was often in the form of small metal device containing radium or other radioactive substances, sometimes called a radia vita emanator. X-ray equipment may contain radioactive substances too. There are strict licensing laws for holding radioactive material. Do not knowingly accept radioactive items into your collection, as this presents a health hazard to staff, and subsequent disposal could incur great expense for your organisation. If you find a radioactive item in your collection, contact your Health and Safety Officer immediately.

Do not assume that the strength or efficacy of a medicine will weaken with age. Although this sometimes happens it is by no means definite, so do not take any risks.

## **B) Legal Issues Relating to Historic Pharmaceutical Collections**

Museums and private individuals are often concerned that the historic medicines they hold are potentially dangerous and should be disposed of, or that possession of them is illegal. This can apply to existing holdings, or to items that a museum or collector may plan to acquire.

The law relating to medical substances is complex. It is regulated by the Medicines Act of 1968, the current Veterinary Medicines Regulations (which are updated each year), the Poisons Act of 1972 and the Misuse of Drugs Act 1971. The Poisons Act of 1972 regulates non-medicinal poisons, which you may find in pharmaceutical collections. (Pharmacists have historically supplied non-medicinal poisonous products, such as arsenic/strychnine-based rat or mole killer).

The table below provides a simple outline of the various classes of medicines/chemicals and their legal status. Further detailed information about these classes, together with an alphabetical list of medicines for human use, with class, and alphabetical lists of non-medicinal poisons, can be found in *Medicines, Ethics and Practice: A Guide for Pharmacists* (see source list). Historic medicines and chemicals are classified under current legislation. Detailed advice on specific queries can be obtained through the Information Centre, the Museum and the Legal and Ethical Advisory Service (i.e. the legal department) of the Royal Pharmaceutical Society – see below for further information.

<b>Class</b>	<b>Legislation under which regulated</b>	<b>Brief Description</b>	<b>Conditions for possession</b>
General Sale List Medicines (GSL)	Medicines Act, 1968	Licensed medicinal products that can be sold from pharmacies <i>or</i> other approved retail premises (eg supermarkets). Listed on General Sale List	None – it is legal for individuals/museums to hold these.
Pharmacy Medicines (P)	Medicines Act, 1968	Products which may be sold only from a registered pharmacy premises and only when a registered pharmacist is on duty.	None- it is legal for individuals/museums to hold these.
Prescription Only Medicines (POM)	Medicines Act, 1968	Medicinal products available only on an appropriate practitioner's prescription. These can only be obtained through registered pharmacies. In general, most substances are listed in the Prescription Only Medicines (Human Use) Order 1997, which includes human POM medicines, whilst other products would be	None – it is legal for individuals/museums to hold these, as long as they are not CDs (see below). Note: Because of these restrictions, museums will usually find difficulty in obtaining examples of specific contemporary POMs (eg Viagra), even

		POMs by virtue of the way in which they are licensed with the relevant body (their marketing authorisation).	from the manufacturer.
Veterinary medicinal products licensed for animal use (VMP)	Veterinary Medicines Regulations (current year)	<p>There are several categories of VMP:</p> <ul style="list-style-type: none"> <li>- medicinal products that are only available against a vet's prescription, (POM-V) – equivalent to human POMs.</li> <li>- medicinal products available against a vet's, pharmacist's or Suitably Qualified Person's (SQP) prescription, (POM-VPS) equivalent to human Ps.</li> <li>- licensed medicinal products that can be sold from pharmacies or other approved retail premises (AVM-GSL) - equivalent to human GSLs.</li> </ul>	As above for the different types of human medicines, none – it is legal for individuals/museums to hold these, as long as they are not CDs (see below).
Controlled Drugs (CD)	Misuse of Drugs Act, 1971	<p>The Act controls 'dangerous or otherwise harmful drugs', which are designated as CDs. These are predominantly narcotics.</p> <p>There are prohibitions on possession, supply, manufacture and import/export of controlled drugs except by licence from the Secretary of State or as allowed by regulations.</p> <p>Controlled drugs are listed under 5 'schedules' (categories) according to different levels of control.</p>	Individual/museum must be in possession of a Home Office Licence to hold CDs. CDs must be stored in a locked safe room or cabinet constructed and maintained to prevent unauthorised access to drugs. Licence holders must make regular reports to the Home Office. See below for contact details.
Non-Medicinal Poisons	Poisons Act, 1972	<p>Substances listed under the Poisons Act. The Poisons List collated under this Act is divided into two parts and 12 schedules. The rules relating to the Act are complex, and there are strict regulations as to who can sell and supply poisons, and to whom they can be supplied (usually for use in trades such as agriculture, horticulture, forestry).</p>	Although it is not strictly illegal for an individual or museum to be already in possession of a non-medicinal poison, they should not acquire them, and the RPSGB Fitness to Practise and Legal Affairs Directorate recommends that those held should be responsibly destroyed. (see below).

As the table shows, substances that should particularly concern individuals/museums are Controlled Drugs and Non-Medicinal Poisons.

### **Assistance with identifying Controlled Drugs and Non-Medicinal Poisons**

If you are concerned that your collection may contain these substances, or that material you are about to acquire may include them, then you may need advice. There are a number of possible lines of enquiry, although there is no one organisation that has responsibility in this area.

1. Contact your local pharmacist who may be able to advise on recent controlled drugs.
2. Contact the Museum of the Royal Pharmaceutical Society who may be able to use their resources and/or liaise with colleagues in other departments to research the items in question. Note that they are unlikely to be able to help to identify unlabelled substances.
3. Contact your Local Waste Authority through your local council (see below)

### **C) Disposal of Controlled Drugs, Non-Medicinal Poisons or Other Medical Products Causing Concern**

You may already have identified items for disposal, and wish to proceed immediately. There are several approaches that can be followed here, and these are listed below. **Under no circumstances dispose of medicines or chemicals by washing them down the sink or lavatory or by putting them in the general refuse collection.**

The following may be able to advise/assist with the disposal of controlled drugs, non-medicinal poisons or other unwanted medicines/chemicals:

1. *Local Waste Authority* – run by the local authority. They can dispose of some chemicals/medicines/non-medicinal poisons, although they can't deal with certain substances, particularly Controlled Drugs. They will explain what services they are able to offer. It *may* be possible to remove the contents of containers so that the containers are preserved, but this depends on the individual waste authority. There is a charge for the services of local waste authorities.
2. *Specialist Waste Disposal Companies* For some substances, for example strychnine, it may be necessary to pay for a specialist commercial company to dispose of them. Your local waste authority, a local pharmacist or a hospital pharmacy may be able to advise you.
3. *Pharmacists* – pharmacists are occasionally able, but not obliged, to accept small quantities of products for disposal. Legislation now limits the types of products that a pharmacy may take back depending on their source. This varies for England, Wales and Scotland.
4. *The Environment Agency (England and Wales), and the Scottish Environment Protection Agency (Scotland)* – are the relevant authorities that can advise on matters concerning waste.

(N.B. All of these routes of disposal will result in the destruction of the drug material.)

#### *The Controlled Drug Liaison Officer*

Museums may prefer to contact the Controlled Drug Liaison Officer (CDLO) via the local police station for advice on the destruction of identified Controlled Drugs. The CDLO is responsible for ensuring that Controlled Drugs regulations are followed, and is authorised to witness the destruction of Controlled Drugs. S/he is the person who would be the point of contact for persons authorised to possess and supply Controlled Drugs or those with Controlled Drug queries.

### **D) Display and Storage of Historic Pharmacy Collections**

#### *Display*

There are no written rules relating to the security of historic medicines on display, but care must be taken to ensure that this is done safely. At a minimum, pharmaceutical products should be displayed in secure, locked showcases with control of keyholder access.

It is permissible to display controlled drugs (where the Museum is in possession of appropriate authority to possess them- see above), but care should be taken to display them in locked, secure, and regularly patrolled cases, preferably alarmed. If you are still unsure about security, an alternative could be to display packaging only with the contents removed (eg an ampoule box with ampoules removed), with labels/captions clearly stating this.

### *Storage*

- Security - Pharmaceutical products should be kept in a locked store with control of keyholder access. Museum staff should be aware of handling requirements for them, both general and specific. When a museum seeks and is granted legal authority to possess controlled drugs, clear advice will be given on secure storage procedures and the museum should expect regular inspections.
- Environment - The ideal environment for storage of pharmaceutical products is darkness, a cool temperature (18 degrees centigrade or lower), and relative humidity of 50-60%.
- Deterioration of medicines – As with all museum objects, modern and historic medicines are not designed to last indefinitely; some deterioration of contents, and packaging, may be expected. Good storage conditions will minimise environmental damage. Regular checks should reveal any major, sudden deterioration. To minimise deterioration, don't open containers, especially if their seal is still unbroken. Particularly don't try to force corks out of bottles, they may have become brittle and will therefore break, and you are unlikely reinsert them successfully.

## E) Source Lists for Further Information

Authors	Title	Publisher	Date	Notes
Appelbe, G & Wingfield, J	Pharmacy Law & Ethics (NB the joint authors of the 1 <sup>st</sup> to 4 <sup>th</sup> editions were G E Appelbe & JR Dale)	The Pharmaceutical Press	1 <sup>st</sup> ed 1976-current (8 <sup>th</sup> edition) 2005	Definitive work on pharmacy law and legal issues relating to drugs
Caduceus (journal)	'Safety Issues in Medical Museums' issue, vol 8, No.2, 1991	The Pearson Museum, Southern Illinois University, USA	1991	Useful articles on all aspects of safety in medical museums, including dealing with hazardous substances & controlled drugs, & radioactive devices
Fleming, D, Paine, C & Rhodes, J Ed	Social History in Museums: A Handbook for Professionals: see section 27.7 'Pharmacy History Material' by K Arnold-Foster	HMSO	1993	Looks at special problems of pharmacy history collections.
Health and Safety Executive	New and Expectant Mothers at Work: A Guide for Employers	HSE	<a href="http://www.hse.gov.uk/mothers">www.hse.gov.uk/mothers</a>	Good general source of information on work related pregnancy hazards (ie chemicals, medicines) some of which may be encountered in pharmaceutical collections.
Health and Safety Executive	The Essentials of Health and Safety at Work	HSE Books	Current edition May 2006	Useful general book with chapter of references to other HSE publications/free leaflets. See also the HSE website <a href="http://www.hse.gov.uk">www.hse.gov.uk</a> for information that can be downloaded free.
RPSGB	Medicines, Ethics & Practice: A Guide for Pharmacists	RPSGB, London	1988-present (new edition annually)	Very useful source of information on classes of medicines and legal matters, includes alphabetical lists of medicines for human use, with class (ie GSL, P,POM, CD)

## Contacts

Organisation	Contact Details	Notes
Health and Safety Executive	Rose Court 2 Southwark Bridge Road London SE1 9HS Tel 020 7717 6000 Website: <a href="http://www.hse.gov.uk">www.hse.gov.uk</a>	See website at <a href="http://www.hse.gov.uk/contact/index.htm">http://www.hse.gov.uk/contact/index.htm</a> for regional office contact details
Home Office  Drug Legislation and Enforcement Unit	Peel Building 6 <sup>th</sup> Floor 2 Marsham Street London SW1P 4DF Tel 020 7035 4848 Website: <a href="http://www.homeoffice.gov.uk">www.homeoffice.gov.uk</a>	For queries regarding Controlled Drugs and licenses as well as Poisons
Environment Agency	National Customer Contact Centre PO Box 544 Rotherham S60 1BY Tel 08708 506 506 Website: <a href="http://www.environment-agency.gov.uk">www.environment-agency.gov.uk</a>	For matters relating to waste in England and Wales.
Scottish Environment Protection Agency	SEPA Corporate Office Erskine Court Castle Business Park STIRLING FK9 4TR Tel 01786 457700 Website: <a href="http://www.sepa.org.uk">www.sepa.org.uk</a>	For matters relating to waste in Scotland.