

Embalming Process, Chemicals & Other Risks

Embalming Process

Details of the embalming process are given on site during Anatomy Lab induction. If you missed out speak to one of the staff.

Chemicals

Chemicals formaldehyde and phenol require special mention.

Formaldehyde

Formaldehyde is one of the chemicals used in the embalming process, consequently, all cadaveric material is contaminated by this substance. Formaldehyde is a **potential carcinogen in humans** (category 2) and skin irritant, consequently, gloves must be worn at all times while examining cadaveric material. This is another reason for not eating your lunch in the lab; apart from the obvious contamination risk, you tend to bite holes in your gloves.

We do not use formaldehyde for the storage of student material. Prosections are stored dry and when rehydration is required, prosections are immersed in a vat containing a glycerol solution for various periods of time. Alternatively, material in everyday use by students is kept moist with water only applied to specimens using a hand spray. Atmospheric levels of all chemicals are further minimised by the air-conditioning system (17 air changes per hour). The current legal limit for formaldehyde is 1ppm. Due to the above-mentioned practices, formaldehyde levels are below the Australian Standard.

Specific health risks associated with formaldehyde include an increase level of spontaneous abortions, consequently, **women in the 1st trimester of pregnancy should not attend the lab**, due to the vulnerability of the foetus. For those in more advanced stages of pregnancy, it is strongly recommended that they also do not attend the lab. Any concerns? Speak to one of the staff.

Phenol

Phenol is an ugly substance. Absorption through the skin is potentially fatal. Keep those gloves on!

Material Safety Data Sheet's (MSDS's) on all chemicals associated with this facility are available from the technical staff, for student perusal, should further information be desired.

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