



You Have Safety Questions? We Have Safety Answers!

QUESTION# 31: *I am concerned about the proposed inclusion of a lab investigation in the new SPH4U course involving the study of radioactive half life, using Cesium-137 as a source. Are there provincial regulations about the use of radioisotopes in high school science labs? If not, are there significant safety concerns for this activity to a degree that teachers should know about?*

RESPONSE: There are no provincial regulations but there are federal regulations. The *Atomic Energy Control Act (1988)* requires users of many radioactive materials to apply for a special licence. However, providing school science laboratories only use samples of radioactive substances of very low specific activity, there is no need to obtain this licence. The use of these low level radiation sources ensures that any safety risks are negligible. Moreover, elaborate safety equipment or protective measures are unnecessary.

««« By the STAO Safety Committee

The STAO Safety Committee welcomes enquiries, with respect to safety issues, from STAO members. Please send your questions to the Safety Committee Chair (ralph_chou@stao.org). Your questions and the STAO Safety Committee responses may be published in Crucible, particularly if the information is deemed of general interest to other STAO members. Anonymity will be guaranteed.

Further guidance on the safe use of radioactive materials is available in the STAO publication *Stay Safe!*

QUESTION# 32: *I have some body parts I would like to get rid of including a human fetus in formaldehyde. What can I do?*

RESPONSE: Preserved specimens of human body parts found in school science prep rooms are a legacy of times when there were few, if any, controls on the use of human remains for educational purposes. There is no longer any use of human remains in the elementary and secondary science curricula, and such specimens should

be disposed of according to current regulations.

In this case, the teacher should contact Ms. Tanya Hatton, Special Needs and Outreach Coordinator in the Office of the Chief Coroner of Ontario, at 416-314-4028 or 877-991-9959. The new Chief Coroner and General Inspector of Anatomy for Ontario is Dr. McLennan, and his number is 416-314-4000. Disposal of human body parts and remains is the jurisdiction of the Chief Coroner's office and nothing should be done until instructions have been given by them.

