

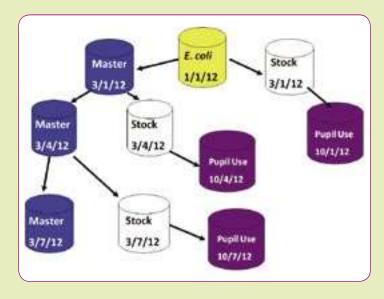
Maintaining microbiological cultures in school

From time to time SSERC receives enquiries about how to best maintain bought in microbiological cultures in schools in line with the SSERC Code of Practice Safety in Microbiology [1].

Microbiological cultures should be obtained from an approved supplier. Microbiological cultures used in schools should originate from a national culture collection and be true to type. An approved supplier is one who can trace the provenance of the supplied culture back to a national culture collection. Microbiological cultures from other sources should be avoided or be the subject of a separate risk assessment. SSERC is happy to provide advice in such circumstances. Cultures should be purchased specifically as and when required and stored for the minimum time practicable. Cultures should not be kept for longer than one year from the time of purchase. If cultures have to be kept for longer than one year for specific reasons a separate risk assessment must be carried out.

Purchased cultures should be dated on arrival and placed in a closed container in a refrigerator or cupboard, both of which should be labelled with Biohazard labels. A log must be kept of all cultures showing:

- · name of microorganism;
- · supplier;
- · date of receipt;
- number of sub cultures made;
- date of each sub culture;
- by whom sub cultures were taken;
- date of disposal.



Best practice when maintaining cultures is to sub culture from the bought in culture onto two agar slopes labelled with microorganism, date and initials of operative. Use one these subcultures (stock) as the source of inoculum for preparing materials for class use and dispose of it along with the class materials once the practical work is complete. Keep the other sub culture (master) as a source of inoculum for further class material or for use if contamination is observed. When using this second (master) subculture, again prepare two agar slopes, keeping one as a new 'master' and using the other as 'stock' for preparing class materials (see diagram). Keep the original culture for use as an additional back up if contamination is detected. Sterilise and dispose of all cultures and class materials as soon as is practicable once class work is complete and in any event no longer than one year after purchase.

Reference

[1] Safety in Microbiology - A Code of Practice for Scottish Schools and Colleges (2012), SSERC www.sserc.org.uk.