Guidance

1. Transport of Biological Samples

This guidance was originally written following an incident in which liquid nitrogen was spilled on one of the University buses. This was presumably from a poorly sealed container being used to transport biological samples. Clearly there was a risk of burns from the liquid nitrogen and a possible risk from the samples if they were hazardous.

When transporting samples particularly those of a potentially infectious nature (including bloods and clinical samples) a number of issues should be considered.

- Work should be organised in such a way as to minimise transport of samples around a building and they should only transported between buildings when absolutely necessary.

- When it is necessary to transport biological materials between buildings both primary and secondary leak proof containers must be used. The secondary container should hold enough absorbent material to surround and contain the sample should any breakage occur.

- Carrying unpackaged tubes on their own or in racks in public areas such as corridors and lifts should be avoided. For transport between laboratories, screw capped tubes are preferable to flip top eppendorf tubes and the use of open or stoppered glass tubes should discouraged because of the potential for breakage if they should be dropped.

The safety office has identified a number of suitable Dewar flasks and cryogenic shipping containers for transporting samples in liquid nitrogen. For further information please contact Dr. Mike Mackett the University Biological Safety Officer (2241 5073) or Mr. Peter Yeung the University Dangerous Goods Manager (2859 2402).

2. Transport of known biohazardous materials.

For any transport between buildings of known biohazardous materials a sealed primary container must be placed into a sealed secondary container bearing a biohazard label on which the name of the material has been written. If the primary container is glass, a rigid, unbreakable secondary container must be used, as broken glass may penetrate a sealed plastic sample bag. Paper towels or other absorbent material should be used to separate primary glass containers.
from each other and from the secondary container to minimize the potential for breakage. The amount of absorbent must be sufficient to absorb the contents of the primary container. Appropriate decontamination of the exterior surfaces of the primary and secondary containers should also be carried out.

For transport of infectious agents and clinical specimens to (or from) other countries it is recommended that a specialist firm is employed as import and export licenses may be required. Compliance with UN international regulations on packaging will also be required and this can be quite involved. For transport to other Universities in Hong Kong or journeys that involve crossing or navigating public highways, for example carrying material from the main campus to buildings on the Sassoon road site, rigid leak proof primary and secondary containers with absorbent material incorporated to contain any spill is required.