

The safe transport of infectious materials and import/export requirements for Hong Kong

Contents

- 1.0 Introduction
- 2.0 General Considerations
- 3.0 Transport on University Campus
- 4.0 Transport within Hong Kong
- 5.0 Import or Export Overseas

1.0 Introduction

The University has many local and international collaborators which on occasions may necessitate the transport of infectious (or potentially infectious) materials within Hong Kong or across international borders. Specimens are collected and shipped for a variety of reasons, including disease investigations, clinical trials, surveillance studies, and routine analyses etc. Researchers may even need to acquire infectious agents from an international collection. Whatever the reason a variety of international requirements eg IATA, WHO may apply both in the country that is the source of the material and in Hong Kong.

Some departments are regular shippers and consign infectious substances for transport many times a year while other researchers may only receive or send occasional shipments. This guidance is intended to assist researchers meet legislative requirements for international import/export and serve as a reminder of best practice for local transport. The principles of appropriate packaging and labelling are the same for transport between University sites e.g. from St Mary to other buildings on Sassoon Rd or for transport of agents/vectors etc. from the FMB building to LAU animal facilities.

2.0 General Considerations

2.1 When transporting samples particularly those of a potentially infectious nature (including bloods and clinical samples) it is important that all reasonably practicable steps are taken to ensure it is done in a safe manner. All materials to be transported must be correctly packaged and labelled. This essentially involves double packaging.

2.1.1 All material should be in a suitable shatterproof primary container (preferably not glass).

2.1.2 The primary container should be placed in a suitable shatterproof secondary container, which is large enough to contain the contents if the primary container fails during transport (ie. if it leaks/spills). Suitable packaging should be included to cushion the primary container. If the sample is to be transported by air, sea, rail, the packaging should conform to UN guidelines/standards.

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

2.3 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 be discouraged because of the potential for breakage if dropped.

Prepared by the safety Office	Approved by Biosafety Committee	Approved Oct 2017
Safe Transport/Import Export	Page 1 of 3	Review Oct 2020

APPENDIX 2

2.4 Any problems occurring during transport, such as leakage or breakage, should be reviewed in order that corrective measures can be taken to prevent recurrence. If workers in the University receive packages that are not properly packaged or labeled they should contact the originator to advise of the problem and ask that any future packages meet the appropriate standards.

2.5 For transport of the more hazardous samples a risk assessment for transport on campus/within in Hong Kong should include the following:-

2.5.1 What are the hazards of the GMO/pathogen. Will they be transported on dry ice or liquid nitrogen? What equipment will be used glass / sharps, large, heavy, long, awkward, unstable – is it suitable for transport on foot?

2.5.2 What potential harm can be caused by each of the hazards? To the person(s) transporting the samples. To the people who may come into contact, including the public. To the environment, both locally and globally.

2.5.3 What are the hazards of the route to be taken? Traffic? Uneven, slippery surfaces? Poor weather conditions?

2.5.4 What control measures need to be adopted to ensure safe transportation?
Packaging – as above, must be packaged to withstand dropping as tripping up and falling is a possible risk.
Cold storage items should be transported using dry ice or cold blocks. Liquid nitrogen should not be used.

2.5.5 What plan is in place in the event of an accidental release or spillage?
Records should be kept where the hazardous substance is being transported from and contact details and phone number of someone competent who can deal with a worst case scenario.

2.6 Please also see the document prepared by the Central Public Health laboratories entitled "Safety Guidelines on Transport of Clinical Specimens and Infectious Substances for Courier Team" available at:-
http://www.chp.gov.hk/files/pdf/safety_guidelines_for_courier_team_2009nov.pdf. (Last accessed 20th October 2017).

3.0 Transport on the University Campus.

For any transport between buildings of known or potentially 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 used 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.

4.0 Transport within Hong Kong

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

Prepared by the safety Office	Approved by Biosafety Committee	Approved Oct 2017
Safe Transport/Import Export	Page 2 of 3	Review Oct 2020

APPENDIX 2

on the Sassoon road site the minimum requirements are that the same precautions should be observed as transporting on the campus (detailed above). However additional arrangements may need to be made dependent on the risk assessment and the details of the samples and how they are stored (e.g. the presence of ice, dry ice or liquid nitrogen). An outer container may be appropriate to avoid too close an inspection by the general public. Travel by a privately hired Taxi is preferable to travel on public transport. If private vehicles are used then it is necessary to ensure that the insurance is appropriate.

5.0 Import or Export Overseas

5.1 Relevant Legislation in Hong Kong

5.1.1 Implementation of the Biological weapons Convention in Hong Kong – CAP 60G, point 3 biological, chemical nuclear weapons. Licenses for import and export are required for potentially dual use agents – listed in an Appendix. This Includes Influenza H5N1, SARS, MERS etc.

5.1.2 Implementation of the International Health Regulations in Hong Kong – CAP 599/CAP599A Section: 14 (1) Import of human corpse, etc. states "A person shall not, without a permit in writing from the Director, knowingly import into Hong Kong—
(a) a human corpse or any part of a human corpse;
(b) an infectious agent;
(c) any human or animal tissue, or tissue fluid, or any part of a human or animal body, that the person has reason to suspect contains an infectious agent; or
(d) any excreta, secretion, blood, or blood component, that the person has reason to suspect contains an infectious agent."

Thus licenses would be required when:-

1. Importing any infectious agent from overseas e.g. for research, laboratory accreditation exercises etc.
2. Importing cell lines containing infectious agents e.g. lymphoblastoid lines immortalized by EBV etc.
3. Importing samples of any kind including clinical material where there is a reasonable expectation that a disease causing infectious agent could be present e.g. from a clinical trial, field trip or environmental sampling.

5.1.3 Implementation of Cartagena protocol in HK – CAP 607
Import and export of Genetically Modified Organisms. Shipping labels etc.

5.2 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. Please also note that these regulations specify that anyone packing dangerous goods (including infectious organisms) must be trained by an accredited organization and will require re-certification on a regular basis.

UN guidance on the transport of dangerous goods is updated regularly (Rev 15 – 2007; Rev 16 – 2009; Rev 17 – 2011; Rev 18 – 2013; Rev 19 – 2015) consequently it is important to look at the current version. For the current version (Rev19) please see:-
(https://www.unece.org/trans/danger/publi/unrec/rev19/19files_e.html (Last accessed September 14th 2017))

Prepared by the safety Office	Approved by Biosafety Committee	Approved Oct 2017
Safe Transport/Import Export	Page 3 of 3	Review Oct 2020