Transport of Biological Material Policy

Introduction

Work in SGUL laboratories may require transport of live biological agents between laboratories within the university or externally to collaborators. Movement of biological material in a safe manner is an important part of laboratory work.

Policy aim

The aim of this policy is to enable biological material originating from SGUL teaching and research laboratories to be transported of in a safe and efficient manner. It will also apply to the transport of potential asphyxiants that may be used to pack biological material that is being transported such as Dry Ice (Solid CO_2).

Scope

This policy applies to all staff and students of St. George's University of London (SGUL) and to any visitors working within SGUL.

Legislation

Many of the activities that are undertaken in laboratories are regulated under the Control of Substances Hazardous to Health (COSHH) regulations 2002 and the Carriage of Dangerous Goods by Road, rail or air regulations 2003 (ADR). The aim of these regulations is to reduce the risk to those undertaking the work and also those who will be transporting the agents. Both of these regulations require that items are securely packed by individuals who have been suitably trained. Transport of material by air is also regulated by The International Air Transport Association (IATA).

Definitions

There are a variety of definitions associated with biological material which are as follows.

Pathogenic human and animal organisms

Human pathogenic organisms such as viruses, bacteria, parasites and prions are defined by the Advisory Committee on Dangerous Pathogens (ACDP) into one of four categories. Materials classified as biohazard 4 are not permitted to be sent or received by SGUL.

Certain animal pathogens are defined under schedule 1 of the Specified Animal Pathogen Order (SAPO) 2008.Recipt and usage of materials containing SAPO agents must be notified to the SHE office.

Genetically Modified Organisms

Genetically modified micro-organisms or genetically modified organisms including plants are those whose DNA or RNA has been altered either by recombination, synthetic biology or other methods as defined by the Genetically Modified Organisms (Contained Use) Regulations 2014.

UN Classifications
Category A and B organisms

Category A material is defined under the transport regulations as an infectious substance which is carried in a form that, when exposure to it occurs, is capable of causing permanent disability, life threatening or fatal disease in otherwise healthy humans or animals.

Category B material is defined under the transport regulations as any infectious substance that does not meet the criteria for inclusion in category A. These are assigned to UN 3373. This would include specimens from patients with known or suspected HIV, HBV or HCV infections.

Biological transport methods

Transport of items within SGUL

Pathogens or blood that need to be moved between laboratories must be placed in a sturdy container with an O-ring which can contain a spill should the container be dropped.

Other items that need to be moved between laboratories e.g. flow cytometry tubes or gels should be placed in a container with a sealable lid.

All material that is moved to and from the Containment Level 3 (CL3) laboratories must be placed in double containment before being moved from the laboratories. This is part of the management protocols of the CL3 laboratories.

Transport of items outside SGUL

All material that requires shipping from SGUL must be securely packed in a primary receptacle, secondary packing and an outer packing that is compliant with the current ADR / ICAO / IATA codes. Information on suitable packing can be obtained from the senior laboratory manager.

Once the material has been packed, the senior laboratory manager must be contacted to arrange for the item to be shipped by an approved courier.

Individuals are not permitted to ship materials off site without the prior approval of the senior laboratory manager or the nominated deputy.

Individual Roles

All individuals within SGUL have roles in ensuring that biological material is transported in a safe manner.

Principal Investigators

- Ensure that suitable containers are available for the movement of items between SGUL laboratories. This includes the movement of blood samples, cell or tissue cultures, bacterial cultures and flow cytometry samples.
- Ensure that staff and students do not ship items outside SGUL without contacting the senior laboratory manger or the nominated deputy.
- Ensure that staff and students are aware how to contact the senior laboratory manager and the process for arranging off-site shipping.

Staff

- Staff must use suitable containers for the movement of items between laboratories.
- Staff must contact the senior laboratory to arrange the transport of materials off-site

- Staff must remind students who they are supervising, that transport of material must be in suitable containers and that they must arrange transport of material off-site via the senior laboratory manager.

Students

- Students must use suitable containers for the movement of items between laboratories.
- Students must contact the senior laboratory to arrange the transport of materials off-site

Information

Further information on the transport of materials is available from the Senior Laboratory Manager (x1603) or the SHE office (x0637).