

Guidelines for transporting biological materials by vehicle - car, truck, bus or train.

You might need to transport biohazards (experiments or waste) from one campus to another by car, truck, bus or train.

You will need to package and label your samples to ensure that, no matter what happens to the package during transport, they will not:

- become contaminated by the environment
- escape containment to contaminate people or the environment.

Transporting biological materials by land vehicle is a regulated activity, and you must do it following these regulations, that are summarised in these Guidelines:

- The IATA Dangerous Goods Regulations.
- The Australia Post, Dangerous and Prohibited Goods and Packaging Guide.
- Australian Code for the Transport of Dangerous Goods by Road and Rail.
- Packaging for surface transport of biological material that may cause disease in humans, animals and plants (AS 4834).
- United Nations Recommendations on the Transport of Dangerous Goods. Model Regulations.

You must either double or triple contain your microorganisms, depending on the microorganism.

Category A biological materials are:

- infectious substances which are capable of causing permanent disability, or a life-threatening or fatal disease to otherwise healthy humans or animals.
- Infectious agents of plants that could cause significant damage to the environment or agriculture are included in this category.

(There is a list of examples in AS 4834)

You must package Category A in triple-containment, high integrity packaging such as IATA Packaging Instructions 602 or Packaging Instructions 650 as used for air transport – see the Guidelines for post or plane.

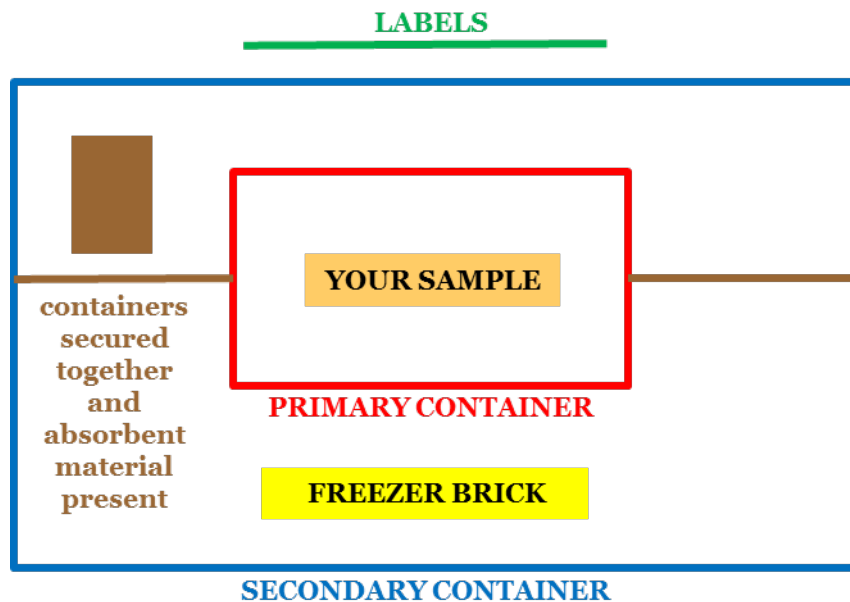
Category B biological material - infectious substances that do not meet the criteria for Category A.

Category C biological material - substances with a low probability of causing disease in humans, animals or plants.

- samples from healthy plants

- samples from healthy humans and animals including excreta, secretions, blood and its components, tissues and tissue fluids.

Category B and C materials need to be double contained as described below.



PRIMARY CONTAINER

- Must be sealed.
- Must be surrounded by enough absorbent paper towel to soak up the volume of liquid inside.
- Must be secured inside the secondary container to prevent movement.

SECONDARY CONTAINER

- Must be sealed.
- Must be rigid, solid, durable enough to survive a car accident.
- Must be larger than a 5cm cube.

Note: a polystyrene esky is not suitable.

LABELS

- A biohazard symbol.
- A brief description of the contents.
- The name and contact phone number of a researcher not accompanying the package, a Facility Manager, or the Biosafety Advisor.

REFRIGERANTS

- Use freezer bricks rather than wet ice.
- If you want to refrigerate your package using dry ice (carbon dioxide) or liquid nitrogen then those are Dangerous Goods and have their own safe handling practices and regulatory requirements that are not covered in this course. Avoid using these refrigerants, but if you need to then you need to find out how to do so safely.

HIGHER CONTAINMENT CONSIDERATIONS

Biological materials such as genetically modified organisms (GMOs), quarantined materials, and live animals have their own transport requirements that also need to be fulfilled. If you want to use these materials then please do the training specific for those materials.