



Loss or Failure of Containment

Primary Containment Devices

In the event of loss of power while working in a primary containment device (e.g. Biosafety Cabinet) or BSC equipment failure, follow the procedure listed below

Biological Safety Cabinet (BSC) Failure Procedure

- **Stop** work immediately.
- Close or cover all open containers, surface decontaminate and return them to the incubator or fridge as appropriate.
- Surface-disinfect all other objects in the BSC before their removal from the cabinet.
- Place all materials to be discarded into biohazard bags within the cabinet.
- Disinfect interior surfaces of cabinet using a suitable non-corrosive disinfectant.
- Close the sash and turn off the blower motor switch.
- Remove contaminated gloves and dispose of them as appropriate; wash hands.
- If the failure is caused by a power outage, restart the cabinet upon return of power and follow the Start Up procedure accordingly.
- If the failure is due to BSC malfunction, affix a warning sign (e.g. "OUT OF ORDER. DO NOT USE") to the cabinet and contact your service provider for repair.
- Decontaminate the cabinet before carrying out any repairs or removing from the containment lab.
- Class II B2 BSCs, where present, should be installed and set-up in a manner to eliminate reversal of airflow from the face of the BSC (i.e., puff-back) during a failure of the heating, ventilation, and air conditioning (HVAC) system or the BSC exhaust fan. Where elimination of puff-back cannot be achieved, the risk associated with puff-back must be mitigated through physical and operational means.

Building ventilation



In the event of loss or failure of building or negatively pressured lab or room ventilation, etc.

- **Stop** work
- Close or cover all open containers, extinguish any open flames and shut down any equipment.
- Evacuate when building alarm or “Go /No Go light is blinking (for e.g. large animal containment in new isolation wing)
- If in lab or Central Animal Facility, lower the sash of the biological safety cabinet.
- Remove personal protective equipment and lab clothing taking care not to contaminate the work area and wash your hands.
- Leave the building by the shortest safe route and proceed to the prearranged assembly point.
- Provide information to emergency response personnel if you have knowledge of the emergency.
- Do not delay leaving the building to try to “save” an experiment.
- Start-up procedures must be performed again while restarting the work

Animal Escape

In accordance to EHS Biosafety Manual, in the event of animal escape, where the animal was administered a biohazard, consult Animal Care Services for developing a work – specific emergency management protocol that includes the consideration of the welfare of the animals and/or follow the procedures described by Central Animal Facility and/or Isolation Unit.