

LOCATION	HAZARD	RISK	CONTROL	RISK	RESPONSIBILITY
GENERAL	Lack of knowledge among science teachers regarding First Aid.	Incorrect treatment of injuries. Serious personal injury. Fatalities	Post list of teachers trained in First Aid in the lab. Train more teachers of Science in First Aid.	Low	Management.
	Non-specialist teachers teaching in laboratories	Teacher being unaware of risks from gas, electricity, chemicals	Non-science teachers not to be allowed teach/supervise in laboratories.	Medium	Management.
	Availability of lab keys to non-science teachers.	Easy access to labs by non-specialists may result in damage to equipment, unauthorized use of chemicals/equipment by students given lab keys.	Lab keys should only be available to science teachers.	Low	Management.
	No means of calling for help in an emergency.	Delay in receiving help may result in more serious injury, death.	Use a mobile phone. Send a student to the Office.	Low	Management.
	Bags and coats on floor of corridor outside labs.	In event of emergency, escape route may be blocked through students/teachers falling over bags/coats.	Provide shelving outside labs for school-bags. Provide coat-hooks in labs for hanging coats.	Low	Management.

Hazard & Risk Assessment – Dec 2020
 Science Laboratories, Patrician Academy

	Emergency Phone Numbers not displayed in laboratories.	Delay in receiving first aid/help may result in more serious injury/death.	Place a list of emergency numbers in each laboratory.	Low	Science co-ordinator
	No cover on sinks in chemistry, physics and biology laboratories.	Litter (pencil shavings, paper, biros, pencils various small objects) blocking the sink resulting in a build up of solid materials in the pipes.	Get covers for sinks	Low	Management.
	Bunsen burners, hot plates, glassware, chemicals and electrical equipment.	Burns, cuts to skin and various chemical reactions.	Inform students of risks prior to experiments.	High	Science teacher in charge of lab class
	No SMOKE DETECTOR in store room.	Fires/explosions going undetected in store-room.	Install smoke detector.	Medium	Management.
	Glassware/equipment on shelving around room.	Risk of glassware or equipment accidentally falling on students.	Shelving provided away from student seating. Shelving replaced with wall cupboards.	Low	Management.
	Electrical sockets placed too close to sinks.	Leads plugged into sockets trailing into sinks.	Re-positioning of electrical sockets.	Medium	Management.
	No lighted EXIT sign above doors	Low risk due to teaching carried out at day, but	Place lighted EXIT signs above doors	Low	Management.

		risk is much higher when teacher works late in Winter months (e.g. preparing expts) and on Open Nights, etc. when parents/adults are present who are not familiar with building.			
	Shortage of spirit thermometers	Mercury thermometers pose high risk to health in the event of breakage.	Replace existing mercury thermometers with spirit thermometers.	High	Science Co-ordinator
	Electrical earthing is being done through the metal conduit protecting the cabling.	In the event of repair work being carried out, the earth may be broken temporarily and possibly permanently resulting in severe electrical shock or death.	Provide an alternative earthing system.	Low	Management.
	Front door of all labs not acting as a fire-proof door due to the grill installed.	In the event of a fire in any of the labs, it could not be contained properly as air can easily get into the room through the grill and further fuel the fire.	Replace present doors with a fire-proof door.	Low	Management.
CHEMISTRY LAB					

Chemical Store Room	Storage of Chemicals	Mixing of incompatible chemicals. Release of toxic gases, fire, explosion.	Re-stack shelves, acquire proper storage containers keeping incompatible chemicals separate.	Medium	Chemistry teacher
	Storage of methanal and HCl in the same room	High risk of explosion from mixing of vapours leaking from bottles.	Store in separate rooms with appropriate containers.	Medium	Chemistry teacher
	Storage of Acids.	Vapours escaping from bottles and reacting with metal container.	Provide container with fan, which removes build-up of acid vapours.	High	Management.
	Fuse-box, light switch and electrical sockets located in chemical store-room.	Risk of explosion from build-up of flammable gases and a spark from electrical devices.	Move fuse-box, sockets and switches outside of store.	Medium	Management
	Labeling of chemicals on shelves incomplete	Difficulty in finding and replacing chemicals in their proper storage locations.	Store chemicals in their proper storage groups and label shelves appropriately.	Low	Chemistry teacher
	Floor cluttered with boxes and instruments.	Tripping may occur.	Maximize use of space. Create more and wider shelving.	Low	Chemistry teacher
Chemistry Laboratory	Shortage of protective gloves	Risk of dermatitis and skin irritations.	Ensure that there is always an adequate supply of protective gloves.	Low	Science co-ordinator

	Cleaners unaware of dangers that can occur in a laboratory, and often work in isolation.	Risk of injury resulting from glassware breaking accidentally, chemical containers being knocked off benches/shelves.	Ensure that chemicals, glassware etc. are stored away from benches. Ensure that cleaners are aware of risks.	Medium	Chemistry Teacher
	Old and worn Bunsen burner tubing.	Gas leaking from tubing and causing fire/explosion.	Replace worn tubing. Check tubing yearly.	Medium	Chemistry teacher
	No sockets at the rear of the laboratory for six electrical devices. A make-shift solution of two extension leads from one socket, trailing over two sinks is in use.	Overloading of socket resulting in fire. Electrical leads may come in contact with water.	Install four double sockets at rear of laboratory.	Low	Management
	No chemical spillage clean-up kit.	Injury to student, damage to floor, furniture etc.	Purchase chemical spillage kit.	Medium	Science co-ordinator
PHYSICS LABORATORY					
Physics Store Room	Floor cluttered with boxes and instruments.	Tripping and injuries may occur.	Maximise use of shelf space.	Low	Physics teacher

	Radioactive materials stored in wooden box.	Radioactive burns, sickness, diarrhea and vomiting, infertility and sometimes death. Small doses can damage our DNA, which can lead to cancer when older.	Provide solid (lead) container for storing radioactive materials.	High	Management
BIOLOGY LABORATORY					
Biology Store Room	Storage of Chemicals	Mixing of incompatible chemicals. Release of toxic gases, fire, explosion.	Re-stack shelves, acquire proper storage containers keeping incompatible chemicals separate.	Low	Biology teacher
	Labeling of Chemicals.	Mixing of incorrect chemicals may result in accident, explosion, fire or death.	Label all chemicals clearly.	Low	Biology teacher
	Acid, bases, toxic, corrosive chemicals not being kept separate.	Mixing of incompatible chemicals. Release of toxic gases, fire, explosion.	Re-stack shelves, acquire proper storage containers keeping incompatible chemicals separate.	Low	Biology teacher
	Storage of flammable liquids in store room.	Greater risk of fire.	Put flammable liquids in an air-tight container, preferably with a trickle fan leading to outside of building.	Low	Management

	Cleaners unaware of dangers that can occur in a laboratory, and often work in isolation.	Risk of injury resulting from glassware breaking accidentally, chemical containers being knocked off benches/shelves.	Ensure that chemicals, glassware etc. are stored away from benches. Ensure that cleaners are aware of risks.	Low	Biology teacher
	Old and worn Bunsen burner rubber tubing.	Gas leaking from tubing and causing fire/explosion.	Replace worn tubing. Check tubing yearly.	Medium	Science co-ordinator
	No chemical spillage clean-up kit.	Injury to student, damage to floor, furniture etc.	Purchase spillage clean-up kits.	Medium	Management
	No chemical spillage clean-up kit.	Injury to student, damage to floor, furniture etc.	Purchase chemical spillage kit for biology laboratory.	Medium	Science co-ordinator