

Ministry of Education St. Kitts & Nevis School Safety Program Manual



“Reducing Vulnerability; Minimising Injury
& Damage in the Education Sector:
Strategies for Success”

Introduction

The Ministry of Education recognizes and accepts that Education is not only a right, but in situations of emergencies, chronic crises and early reconstruction, it provides physical, psychosocial and cognitive protection which can be both life-saving and life-sustaining. Education sustains life by offering safe spaces for learning, as well as the ability to identify and provide support for affected individuals – particularly children and adolescents. Education mitigates the psychosocial impact of conflict and disasters by giving a sense of normalcy, stability, structure, and hope for the future during a time of crisis, and provides essential building blocks for future economic stability. Education, critically, also provides the knowledge and skills to survive in a crisis via the dissemination of lifesaving information.

This manual is produced with this guiding principle in sharp focus.



SCHOOL SAFETY PROGRAM

Justification

The quality of life in the future depends on the time spent preventing disasters today. The most vulnerable population on the planet earth is our children. Creating a safe learning environment for them is an extremely important task.

It is recognized that school populations (while school is in session) represent a vulnerable captive group within a confined space.

Many Public and Private Schools are constructed in congested areas and are exposed to numerous hazards. This vulnerability is further compounded by poor choices of building sites, non-compliance with or absence of building codes and lack of preparedness measures which can have catastrophic effects in the event of an earthquake, for example.

Structural and non- structural interventions that reduce vulnerability are very important for schools as well as all lifeline structures.

The time for planning is not **after** a disaster has occurred. The education community should prepare itself to be self -sufficient, developing the capacity to protect and care for the schools' population until outside help arrives.

Hazards such as floods, earthquakes, fires and hurricanes can

strike at any time with little or no warning, therefore teachers and staff must know how to guide students safely through the crisis. Knowledge is the difference between calm and chaos; it can make the difference between life and death.

This Manual, accordingly, presents in detailed specificity descriptions of disastrous events that our schools and their populations are subject to, complete with response measures to be taken should any such event occur while schools are in session.

In essence, this Manual represents a School Safety Programme, whose aim is to safeguard the safety of teachers, students and others whose daily routine obliges them to be on school premises for most if not all of the work day.

A comprehensive School Safety Programme suggests a series of ongoing activities, which include:

- Identifying the hazards in the school and around the campus area
- Conducting drills
- Preparation of a plan by involving parents, teachers and students

The plan seeks to build on the capacities of the institutions and the individuals to meet the challenges during an unforeseen event.

Schools and colleges must prepare themselves for a major

damaging event. Being prepared will improve the ability to respond to disaster. School administrators, and teachers will have to be self sufficient – relying on their own resources to protect and care for the student population and the surrounding communities until external assistance is available.

School children and their families require more information and education on safety and preparedness measures.

It is now settled understanding that the matter of school safety is as integral and critical a component of the teaching-learning enterprise as are, for example, the academic regime, aesthetics, discipline, moral purpose, extra-curricular activities, teacher quality, student performance, and parental / stakeholders involvement.

Separately and together, these determine the level and quality of school success and effectiveness.

In St. Kitts, public schools are squarely in the focus of the Ministry of Education with respect to school safety, with emphasis on disaster prevention, preparation, mitigation and management.

As could well be imagined, the central concern is that in the event of a hazard visiting a school or schools while in session, casualties, among both staff and students, are absolutely minimized.

In this respect, special attention must be paid to school response to earthquakes and tsunamis, but also to other dangers such as

fires, explosions, falls, fractures, criminal attackers and chemical toxic spills.

Accordingly, a regime of training for teachers is an absolute pre-requisite.

This includes exposure to hands-on-exercise in use of fire extinguishers, first-aid-kits, simulation and table-top exercises, and, very importantly, evacuation drills, especially as they relate to earthquakes, tsunamis and fires.

Such drills must be executed with satisfactory levels of success at all schools. **It is simply critical that, given the extreme vulnerability of all schools to hazards of one kind or another (some schools are susceptible to a number of hazards), that all schools develop a disaster plan, have established safe zones and evaluation routes, and engage in periodic simulation drills.**

Disasters, some more so than others, are like sickness: We **do not** know when they will strike. When they do, they usually occasion much pain and suffering. It is infinitely important that we individually and collectively prepare for the possibility and probability of such a visit.

It is important to note that this Manual contains information that is generally applicable to typical school environments, but that it is expected that, given the diversity of location, size, layout, student and teacher population, and topographical features that exists among schools, there will be reason and

need for adjusting the recommendations herein outlined to suit each particular unique scenario.

In all cases, of course, the idea, the ideal, the objective is to reduce if not remove the danger to the lives, safety, well-being and dignity of students, teachers and others in disasters and emergencies.

In addition, in light of near-constant changes to the physical structure and demographic composition of schools, it is advisable that this Manual be updated on an at-least-triennial basis.

The above notwithstanding, this Manual, although not prescriptive, is presented in the confident belief that fidelity to its basic premise and proposed strategies represents adequacy of efforts needed to reduce to its barest minimum the negative impact of any hazard, disaster or emergency that may call on any of our schools while in active operation.

Particularly, we do not wish for one disaster (e.g. earthquake / violent criminal attack) to lead to triggering another (stampede, trampling, death.).

EARTHQUAKE

An earthquake is a sudden shaking of the earth caused by the breaking and shifting of rocks beneath the earth's surface. It is a movement within the earth, associated with tectonic plates.

This vibration, which can also be precipitated by volcanic eruptions, meteor impacts, or underground explosions or collapses, can range from a slight trembling to an abrupt, massive movement that lasts from a few seconds to as long as a minute. The earth can crack open in one or several places, producing gaps or holes ranging in size from a few feet to many miles in length.

An earthquake can be *feeble* or *catastrophic* in its effect. Earthquakes cannot be prevented, and predicting them is a science that is both inexact and in its infant stages.

There are no warnings for when an earthquake is going to occur. In a few seconds, buildings, including schools, and roads can be totally destroyed.

An earthquake is usually followed by an aftershock, which is another trembling or quaking of the earth, and which could be as strong as the initial quake. In fact, there can be several aftershocks spread over several hours.

In the event of an earthquake while in session at school, teachers, students and others should **IMMEDIATELY** get under a desk or between the door frames. They should cover their

heads and hold on to a sturdy object (the DCH), and remain quiet and calm, until the shaking stops.

If one is inside, he must stay inside. Do not run outside. If one is outside the classroom, he should swiftly head for the closest open space, drop, and cover his head.

After the shaking stops, everyone should head quickly but orderly to the school's designated safe zone for earthquakes, following the prescribed evacuation route.

An earthquake can result in weakened walls of buildings, the shattering of glass windows, etc., fallen electricity lines, broken gas lines, or cracks in the earth.

Students must therefore remain in the safe zone until given the clearance to vacate, and they must follow directions as to what to do next, where to go, etc., by relevant authorities.

When the earth begins to quake, students, etc. **MUST NOT** delay themselves by attempting to retrieve personal belongings.

People are more important and are worth more than their possessions, which can always be replaced.

After the earthquake, teachers must check for:

- Injuries
- Weakened walls or ceilings
- Fires
- Broken water pipes
- Spilled liquids, especially flammable ones, and acids
- Fallen power lines or electrical wires
- Listen out for Tsunami warning
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TSUNAMIS

Tsunamis occur when the sea surface is disturbed by shock waves. Huge waves are formed. These waves travel at great speeds across the sea.

A tsunami is a huge tidal wave or series of waves that may follow an earthquake that lasts 20 seconds or more. However, a tsunami can also be generated by landslides (falling into the sea), or underwater volcanic eruptions.

There is very little advance warning of a tsunami. However, a tsunami is usually preceded by dramatically receding shorelines, and the behavior / re-action of animals heading for higher ground.

Also, if a strong, strange roar is heard by or coming from the sea, and the water withdraws an usual distance from the shore, everyone should begin to **RUN** - not drive! – to higher ground.

It must be emphasized that, upon the receipt of a warning of an impending tsunami, students and teachers must immediately abandon all activity and RUN for the designated safe zone for tsunamis, which must be higher ground inland, following prescribed evacuation routes and procedures, which, of course, may vary from school to school.

Schools are NOT to wait for an official warning of a tsunami before evacuating. When any of the signs described occurs, that itself is the warning, the signal to begin moving to a higher elevation without delay.

Almost all schools in St. Kitts are in low-lying areas close to (< 1 mile from) the coast. They are therefore in the danger zone, and are very susceptible to a tsunami, which usually travels as far as 1 mile inland with inundating, powerful forces of water.

Following the tsunami, teachers will instruct students as to what happens next. Ideally, students should have their parents collect them.



HURRICANES

Fortunately, hurricanes always give some advance notice of their approach, usually no less than 48 hours.

Schools are therefore almost **NEVER** in session when a hurricane strikes, although a freak storm can develop without warning.

In preparation for a hurricane, teachers should secure the school premises by:

- Taking an inventory of the school's essential equipment, furniture and supplies.
- Plastic-bagging all important records, files, documents, etc. , and storing them above-ground
- Shuttering up all the open doors and windows
- Turning off water, electricity and gas
- Placing all desks and chairs tightly in one corner of the (class or other) room
- Chaining garbage bins to a firm, solid object

Following the passage of a hurricane, teachers must:

- Check for damage (by wind or water) to offices, labs, classrooms, libraries, furniture, etc.
- Ensure that water and toilet facilities operate properly
- Ascertain that no fallen or loose electrical wires, or broken gas mains, are present

- Confirm that the structural integrity of the physical plant is in acceptable condition.

LANDSLIDES

Very few schools in St. Kitts are likely to be directly or immediately vulnerable to a landslide, as most schools are not located near enough to the foot of any hill or mountain to be so readily impacted.

A landslide happens when chunks of land, usually including rocks and dirt, slide down the slope of a hill or mountain. It may occur gradually, or be sudden, triggered by heavy, sustained rainfall (water logging), or an earthquake, or a volcanic eruption. However, a landslide may also be triggered by deforestation, vegetation removal, or construction of roads and/or buildings on steep slopes.

Some tell-tale signs of a landslide include:

- Doors or windows stick or jam for the first time;
- New cracks appear in plaster, tile, brick, or foundations;
- Outside walls, walkways, or stairs begin pulling away from the building;
- Slowly-developing, widening cracks appear on the ground or on paved areas such as streets or driveways;

- Underground utility lines break
- Bulging ground appears at the base of a slope;
- Ground water seeps to the surface in new locations;
- Fences, retaining walls, utility poles, or trees tilt or move
- You hear a faint rumbling sound that increases in volume as the landslide nears. The ground slopes downward in one specific direction and may begin shifting in that direction under your feet.

Students and teachers should head quickly to the safe zone for landslides via established evacuation routes, in the event of a landslide. If there is not enough time to do so, they should curl themselves up into a tight ball and protect their head until the danger has passed.

VOLCANIC ERUPTION

The small size of St. Kitts makes it difficult for schools to completely avoid the effects of a volcanic eruption, irrespective of their location.

This is because volcanoes spew not only huge amounts of gases, lava and rocks into the atmosphere and onto the land, but they also spread much dust and ash for miles around.

In the case of an eruption of our lone volcano (Mt. Misery / Mt. Liamuiga), students and teachers must move as far away from the volcano as possible, as quickly as they can, preferably via wheeled transport. Going into the sea is NOT recommended.

Pyroclastic flows (a mixture of very hot gases, ash, fine pumice and rocks) are almost always produced by a volcanic eruption. These must be avoided at all costs. They travel very fast, in excess of 100 miles per hour at times, meaning not even Usain Bolt can outrun them, and simply inhaling the fumes can be extremely problematic, even deadly.

If ash/dust begins to fall, students and teachers must remain inside classroom, etc. , and close all doors and windows. If outdoors, they must proceed indoors, and remain there. They should, where possible, avoid areas downwind of volcano.

Following a volcanic eruption, students and teachers must avoid ash deposits or mudflows. These are extremely dangerous.

Roofs of schools must be cleared of ash, as an accumulation of it is very heavy, and can cause roofs to collapse.

Where dust or ash is present, one should wear long-sleeved shirts and pants, boots, goggles to protect the eyes, and dust masks or damp cloth over face to breath properly.

ACID/CHEMICAL SPILL

If such a mishap occurs, the teacher-in-charge must have all students in the room/area move as far away as possible from the accident site, and secure the room/area (prevent entry or access) until trained experts are summoned to clean and clear the area.

If a student/teacher is affected, he / she should be administered relevant first aid until professional help arrives via the EMS or a doctor, or he / she is taken to the hospital.

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EXPLOSION

In the event of an explosion (gas cylinder, incorrect mixture of gases, etc.), the likely danger is that of fire.

If a student / teacher is hurt (burnt, etc.), appropriate first-aid should be applied until professional assistance is on hand.

Where a fire ensues, the protocol / procedures as outlined in / for dealing with Fires are to be adopted and followed.

To avoid chemical spillage and explosions, students and (especially) teachers must ensure that basic safety procedures are practised. These include:

- Use of a fire extinguisher, where appropriate
- Immediately turn off stove or gas, if gas is smelled.
- Avoid use of ignition devices (matches, lighters, cell phones or light switches)
- Open all doors and windows to let gas out and fresh air in
- Call gas dealer, if necessary, to deal with cylinder problems as soon as they arise or are detected
- Ensure that only correct, approved chemicals, acids, hoses, containers, substances, etc. are used
- Absolutely no smoking takes place ever, anywhere on the school compound.

CRIMINAL INVASION / ATTACK

Ideally, a functioning security guard system should serve as a sufficient deterrent to any would-be attacker having quick or easy access to the school, or to any student or teacher therein.

If such security is absent or is breached, teachers should summon all students indoors, close all doors and windows, and alert the principal , or, in cases where this is not practical or feasible, call the police.

The use of mace, pepper spray, acid or karate may be employed if there is immediate danger to any student or teacher's physical safety, to subdue / weaken / slow down an attacker .

Diversionary or stalling tactics, (including negotiation) may also be used, while the security forces are summoned.

If a particular student or teacher is targeted, that person should be hidden in an inaccessible area, or hustled off the premises, to the nearest army or police post, for protection.

FIRE

Fires produce light flames, heat and smoke. They can be caused by students or teachers' improper use of matches, chemicals, acids, gas cylinders, stoves, electrical appliances, or gasoline. Of course, they can also be started by electrical short-circuits, spontaneous combustion, leakage of gases, or overload.

A fire's heat and smoke are often more dangerous than the flames themselves, as inhaling the super-hot air can scorch, injure and destroy the lungs. A fire can also produce poisonous gases that make people confused and drowsy, thereby being unable to react briskly, effectively and wisely.

Of course, upon the outbreak of a fire, students and teachers are to immediately vacate the area, and head for the school's safety zone for fire, using the set evacuation route. The Fire Department is to be summoned, irrespective of other action taken.

If the fire is small and confined to a limited area, fire extinguishers should be used to control same, once the type of fire is determined. (The use of the wrong type of fire extinguishers will only exacerbate the situation).

In the event of a fire, if a student/ teacher's clothing catches fire, he / she MUST NOT RUN!! Instead, he / she must stop, drop and roll, and others must smother the fire with a heavy towel or rug.

No one is to ever return to a burning or smoke-filled room to attempt to retrieve any personal or school item.

If unable to exit a room on fire or filled with smoke, one should crawl low, keeping his head as close to the ground as possible, as the air closest to the ground is always cleaner.

A closed door helps slow the spread of flames, heat and smoke. Halls, stairways and corridors are natural escape routes. These should always be kept clear and free of obstacles.

No one should attempt to jump from a burning room or area that is more than two (2) storeys high, and even then, it is safest to jump onto a pile of dirt or grass.

The following applies specifically to school kitchens/ Home Economic Centers:

- Do not store things on or over the stove. People get burned reaching over hot burners.
- Turn pot handles in so they can't get knocked off the stove or pulled down by students.
- Be careful when deep-frying or cooking with grease. If a grease fire starts, cover the pan with a lid to smother the flames, and turn off the burner. Do not pour water on a grease fire, use sand or dirt.
- Do not dry or air clothing over a stove.
- Never leave cooking unattended. Fires can start quickly and become serious when no one is watching.
- Keep your stove oven clean. Old grease and food particles can catch fire.

- Keep matches out of the reach of children.
- Keep paper/ cloth towels away from an open flame.
- Be sure that all propane gas tanks have no leaks.
- Do not place your stove near a window with a curtain.
- Never use outdoor B-B-Q grills indoors. This is due not only to fire hazards, but because deadly carbon monoxide gas will be released.
- Use appropriate starter for the B-B-Q grill, never use gasoline, naphtha, kerosene or flammable liquid as a starter.
- Be alert when you cook, and keep small children out of the way.
- Keep pot handles turned inwards.



Fire Safety Procedures at Schools

1. Upon hearing the sound of the fire alarm, all students and teachers should stop what they are doing immediately and evacuate the facility using the closest, most appropriate exit route or door.
2. Students and teachers should proceed to a pre-established assemble area. This area must be a safe distance away from the school.
3. On reaching the assemble area, a designated teacher must take a head count of all students. This is to determine if everyone is accounted for. This information must be passed on to the emergency personnel when they arrive on the scene.
4. Once a successful evacuation of the school has been achieved, no teacher or student should return to the facility for any reason whatsoever.
5. Students and teachers are to remain in assemble area until the all-clear is given by the emergency personnel who responded to the scene.

Conclusion

Each school must craft its own safety plan, unique to its topographical, geographical, demographic, pedagogic and other peculiar circumstances.

This must include the management of disasters, evacuation routes and safety zones. Regular evacuation drills are compulsory.

The needs of schools, with respect to school safety, will also differ based on variations in size, location, facilities, amenities, vulnerabilities, and strength of partnership / stakeholder involvement and inputs. These are to be addressed judiciously.

The leadership / administration of schools is expected to be prepared to respond to any / all of the hazards described in this Manual, to ensure that schools are fit and ready to be (re-) occupied almost immediately after any such hazard. Uninterrupted teaching and learning is the preferred goal.

This is to be achieved via having a cadre of teachers trained in various elements of disaster management, including the use of and expertise in fire extinguishers, first-aid, first-aid kits, and disaster mitigation.

However, all schools, teachers and students must know, believe and / practise the dictum that prevention is (always) better than cure, and that school safety is best assured and secured when there is a robust regime of behaviours and attitudes focused on preventing disasters in the first place.

