

# Disaster and Emergency Preparedness: Guidance for Schools



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# Disaster and Emergency Preparedness: Guidance for Schools



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## Foreword



This handbook and its companion activity guide—the *Disaster and Emergency Preparedness: Activity Guide for K to 6th Grade Teachers*—were prepared as a resource for school administrators and teachers to serve as a basis for policy development. They also provide an important resource for classroom activities and awareness-raising among children and communities.

Planning for natural disasters and emergencies is something every educational institution must consider, regardless of its size or location.

It is not possible to plan for every eventuality that might occur; however, preparation is key to saving lives if a disaster strikes.

IFC takes health, safety, and environmental issues very seriously—in relation to its own workplaces and those of its clients and partners.

These guides draw on a range of resources and experience including that of the World Bank Group’s Environmental, Health, and Safety Guidelines and the work of the Risk Reduction Education for Disasters group (Risk RED).

The guides were prepared as part of IFC’s Health and Education Advisory Services Project (567768). We acknowledge the work of Marla Petal and Rebekah Green.

A handwritten signature in black ink that reads "Guy Ellena".

Guy Ellena  
Director, Health and Education  
IFC





# Introduction

More than 400 national disasters take place every year, affecting more than 230 million people and causing an average of almost 75,000 deaths annually (CRED, 2008). Worldwide, 450 cities with populations over 1 million face recurring earthquakes. Cyclones, typhoons and hurricanes are among the deadliest and costliest of disasters. Droughts and desertification currently affect 250 million people and threaten 1.2 billion people in 110 countries (UNESCO, 2007). Annually recurring floods regularly prevent millions of children from attending a full year of school.

Education is a human right, universal and inalienable. Education is especially important in enabling people to reach their full potential and exercise other rights. This right does not disappear or get suspended because of disasters and emergencies. When education is interrupted or limited, students drop out, with negative and permanent economic and social impacts for students, their families, and their communities. Natural hazards are part of the context for educational planning. Whether it is annually recurring floods, a once-in-5-generations earthquake, the increasing severity of storms and cyclones, water shortages, or the slow onset of rising sea water levels, these known and expected hazards can be mitigated with the determined application of knowledge, education, and ingenuity.

We are not able to prevent the earth from shaking, the wind from blowing, or the rain from falling. However, with assessment and planning, physical and environmental protection and response preparedness we can prevent these events from becoming disasters. Since schools are our universal institution for sharing knowledge and skills, the expectations for schools to be role models in disaster prevention is high. Successful disaster mitigation is one of the ultimate tests of the success of the education we provide over generations.

This *Handbook* is written for administrators, teachers, support staff, and other individuals involved in emergency and disaster preparedness at school. Its purposes are:

- To guide administrators and staff in assessing risks and planning and carrying out physical protection measures;

- To develop skills and provisions for disaster and emergency preparedness, response, and rapid recovery;
- To support schools in developing disaster and emergency plans specific to their local needs and reflecting good practices internationally and nationally.

This handbook has been prepared with a primary focus on ‘school safety’ and thus the language used throughout refers to ‘schools’ versus ‘universities’. However, the underlying tenets in terms of the development of policy, planning and implementation is equally relevant regardless of the type of institution in question.

# School Disaster Management

*School Disaster Management* is the process of assessment and planning, physical protection and response capacity development designed to:

1. Protect students and the staff from physical harm;
2. Minimize disruption and ensure the continuity of education for all children;
3. Develop and maintain a culture of safety.

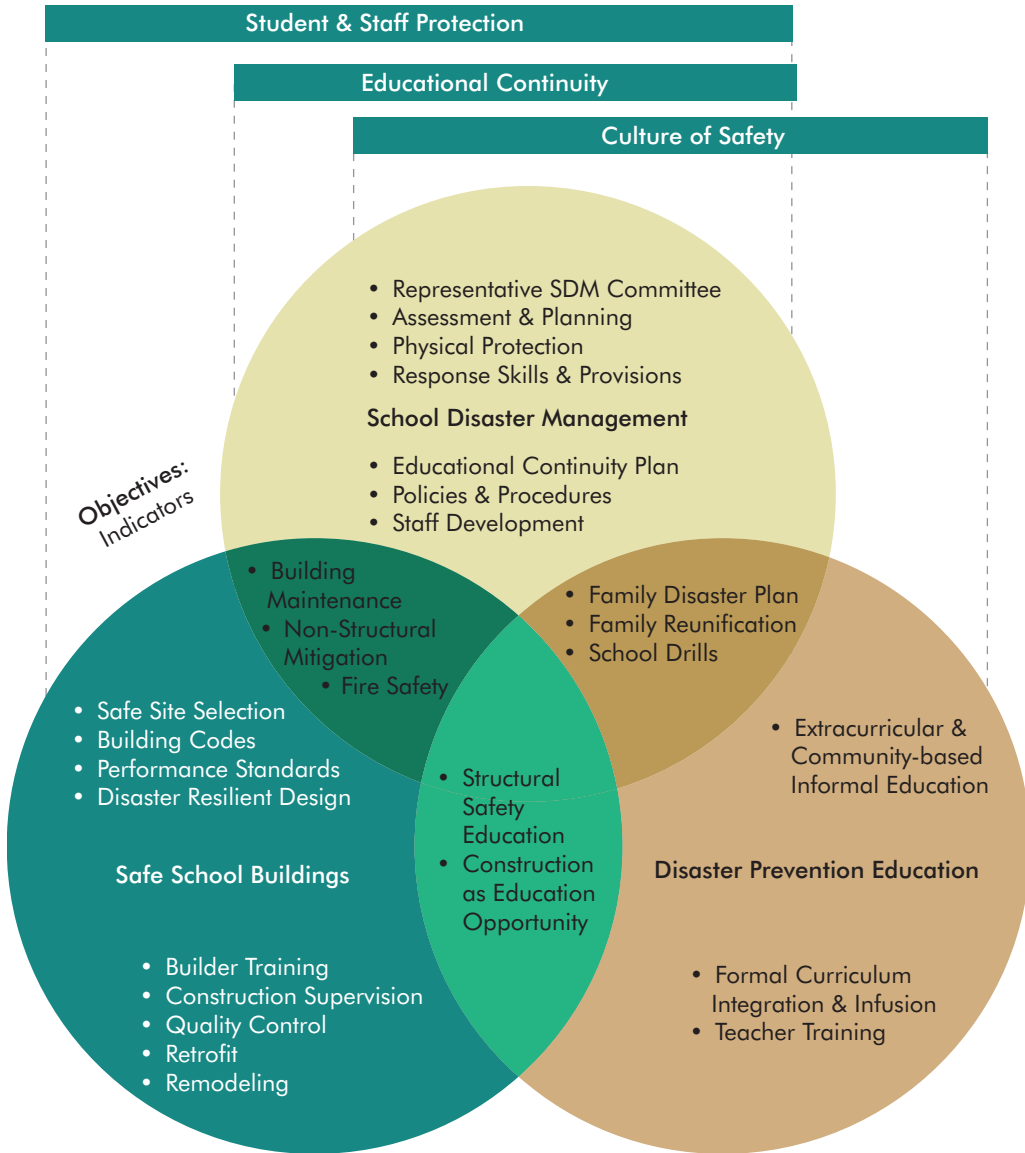
School safety and educational continuity require a dynamic, continuous process initiated by management and involving workers, students, parents, and the local community. School disaster management involves the familiar cycle of steps found in all project management: *assess* hazards, vulnerabilities, capacities and resources; *plan and implement* for physical risk reduction, maintenance of safe facilities, standard operating procedures and training for disaster response; *test* mitigation and preparedness plans and skills regularly, with realistic simulation drills; and *revise* your plan based on your experience.

School disaster management mirrors individual and family disaster prevention, and wider community disaster prevention efforts. This guidance document is organized to help remember and observe the parallel processes for disaster prevention that are taken up at every level of society. The full scope of activities is included as follows:

1. **Assessment and planning** – establishing or empowering your school disaster management committee; assessing your risks, hazards, vulnerabilities and capacities; making contingency plans for educational continuity; communicating your plan.
2. **Physical and environmental protection** – structural safety maintenance, non-structural mitigation; local infrastructure and environmental mitigation; fire safety.
3. **Response capacity development** – standard operating procedures; response skills and organization; response provisions.

## Comprehensive School Safety Schema

### GOALS:



4. **Practicing, monitoring, and improving** – holding simulation drills to practice, reflect upon and update your plan; monitoring indicators for school disaster management.

## 1. Assessment and planning

Assessment and planning is the starting point for all thoughtful mitigation and safety efforts. For without assessment, planning is arbitrary and without planning, assessment has no purpose. The steps below can be accomplished in a matter of days.

### ***Establish or empower your school disaster and emergency management committee***

School safety is the job of the entire school community. This effort requires leadership and coordination by school administration, and involvement and participation from all sectors of the school community.

Each school should establish and maintain an ongoing School Disaster Management Committee (also called a School Safety Committee, or School Disaster and Emergency Management Committee) to oversee disaster risk reduction and preparedness. This may be the job of a pre-existing committee, sub-committee with a similar mission, or one newly established for this purpose. This committee develops, adapts, implements, and updates the school disaster management plan. It will typically meet intensively at the beginning of each school year and monthly during the school year. It will encourage personal and organizational preparedness, guide mitigation work, assure two fire and building evacuation drills annually, lead one full simulation drill annually, evaluate the results, and adjust the plan accordingly. Ideally, the committee is empowered by and maintains formal links between school and disaster management authorities.

School Disaster Management Committee members need strong leadership (ideally the school principal or assistant principal). The committee is most effective when it involves *representatives* of all major stakeholder groups, such as those listed below:

- School administration;
- Teachers – larger schools should make sure that all major departments or sections of school faculty and staff are represented;
- Staff – this includes facilities, maintenance, nutrition, security, health, counseling, transportation etc.
- Parents – this should be linked to the parent-teacher association or similar school welfare committee;
- School neighbors – this includes neighborhood civic association, large businesses, and public safety officials. It may be accomplished through communication and liaison where appropriate with police, fire services, emergency management authorities, neighborhood association, local business partners, school board, neighborhood elected officials and so on;

- Vulnerable groups members – it may also be important to have an individual representing people with disabilities and other vulnerable groups whose needs might otherwise be overlooked;
- Students – ideally, this will be an elected representative from the student body.

Representatives are needed to facilitate two-way communication between all concerned groups, in the process of planning.

Members should remember that resilience is not accomplished all at once, but is a continuous process that can be broken down into small steps. Every small step is important in reaching the goals of safety and educational continuity. The committee might start by creating a calendar of activities to develop awareness and build momentum throughout the school year. Major milestones include:

- Form or re-form committee;
- Distribute Family Disaster Plan forms to staff, students and families;
- Complete School Hazard Impact Assessment; Identify vulnerabilities and capacities;
- Prioritize mitigation activities;
- Develop staff training plan;
- Review basic emergency and standard operating procedures;
- Conduct school and neighborhood hazard hunt;
- Check *School Evacuation Route Maps* posted in each classroom and corridor;
- Check fire suppression equipment;
- Identify campus and neighborhood risks, and resources on maps;
- Post neighborhood and school campus maps prominently;
- Check and re-supply administration, nursing office, and classroom *Go-Bags*;
- Request student comfort kits from families;
- Check and re-supply first aid kits and emergency supplies;
- Communicate student-family reunification procedures to parents;
- Update student emergency release permissions;
- Schedule fire drill and full simulation drills;
- Practice drills with each class;
- Minimum of two annual fire and building evacuation drills;
- Implement full simulation drill for other hazards.
- Evaluate drill and revise plans and procedures.

It is a good idea to have one large *school safety bulletin board* in a prominent location, which the committee can use to share information and to create and maintain disaster pre-

vention awareness in the school community. It is particularly important for the committee to remember that students of all ages *can* and *should* be involved, as much as possible and as appropriate, in all aspects of school disaster prevention. This learning experience will contribute to a culture of safety for future generations. Students can be involved as rotating classroom representatives, student government volunteers, scout volunteers, and through extra-curricular activities.

A School Disaster Plan is always a work-in-progress, and never a finished document. Successful plans emphasize planning as a process, rather than a neatly bound document. In the course of the steps below, you will generate and re-generate live documentation that will constitute your “plan.” What is of crucial importance is having everyone participate in the planning, and learning and continuing to develop the plan through practice.

### **Assess risks, hazards, vulnerabilities and capacities**

Risks are assessed by considering potential hazards (whether these are natural, man-made, or combined), in relationship to a community’s vulnerability characteristics (i.e., the circumstances that make it susceptible to damaging effects of a hazard. Vulnerabilities apply to groups of people and to individuals, to the built environment and infrastructure, and to the natural environment. For example, young children, older adults, people with disabilities, poor people, minority language groups, recent immigrants, and illiterate people tend to be more vulnerable. Buildings not constructed to withstand hazards are vulnerable. Coastlines unprotected by coral reefs and mangrove forests are vulnerable to high winds. Marine life is vulnerable to oil spills, and so on.



The steps below will guide you to document the hazards you face, the vulnerability characteristics of people and places, and the resulting risks. Constructing your own risk matrix can help to see the larger picture, and focus and prioritize your efforts to reduce vulnerabilities and risks. This should be approached through research and dialogue.

## Assessing your hazards and risks

Using the *Risk Assessment Matrix* in the Addenda, work as a group to fill in the chart, taking these steps:

- A. Identify all of the hazards that your school community may face. These may be of "natural" and/or "man-made" origin.
- B. Discuss how likely these hazards are. In the case of earthquake, flood, volcano, landslide and similar, check with scientific and technical or disaster management authorities to be sure that you have an accurate understanding of these likelihoods. Some hazards are ever-present, some seasonal, some increase, and some are infrequent but inevitable. Rate the likelihood on a scale of 1 to 5. You should be planning for what may happen sometime during your school career, or your children and grandchildren's school years.

| HAZARDS    | 1        | 2   | 3      | 4    | 5         |
|------------|----------|-----|--------|------|-----------|
| Likelihood | Very low | Low | Medium | High | Very high |

- C. Rate the impact severity for each of these hazards on a scale of 1 to 5. When rating impact severity, consider the wide range of losses that your school and community face, including these factors:
  - **Human**—deaths, injuries, disability;
  - **Physical**—damage to buildings, equipment, supplies;
  - **Socia Cultural**—disruption and loss of friends, mentors, communities, cultural heritage;
  - **Economic**—cost of repair and replacement, cost to students and families of delayed or incomplete education, loss of livelihoods in education;
  - **Environmental**—loss of natural resources and habitats;
  - **Psychosocial**—lost continuities, hopes and dreams;
  - **Educational**—disrupted or degraded services, quality, outcomes.

Your community may be better prepared for some hazards than for others. As you reduce your vulnerabilities there will be less to worry about.

| VULNERABILITIES | 1     | 2            | 3        | 4           | 5        |
|-----------------|-------|--------------|----------|-------------|----------|
| Impact severity | Minor | Controllable | Critical | Devastating | Terminal |



D. Find the relative risk score, by multiplying the hazard likelihood by impact severity scores.

| RISK SCORE  | 1-3      | 8-4 | 14-9   | 19-15 | 25-20     |
|-------------|----------|-----|--------|-------|-----------|
| Description | Very low | Low | Medium | High  | Very high |

E. Then, in Column E, convert your risk scores to simple priority scores: 3-low 2-medium 1-high.

| RISK SCORE     | 1-3 | 8-4 | 14-9   | 19-15 | 25-20 |
|----------------|-----|-----|--------|-------|-------|
| PRIORITY LEVEL | 3   | 3   | 2      | 1     | 1     |
| Description    | Low |     | Medium | High  |       |

## Assessing structural safety

Once you have prioritized the hazards that you will be addressing, then you will need to look further to assess structural and non-structural risks, and your resources for mitigation, response and recovery. The location, design and construction of a building can increase or decrease your school's vulnerability in the case of fire, earthquake, flood, landslide, snow or windstorm, extreme temperature, volcanic hazards, or bomb threats.



If you have identified these hazards as priorities, ideally you will already have taken structural safety measures in the course of school site selection and school construction, retrofit or remodeling. Note that for IFC projects, structural engineers and architects responsible for facilities, buildings, plants and structures should certify the applicability and appropriateness of the design criteria employed (IFC EHS Guidelines 2007 p.81).

The *School Building Safety Checklist* in the Addenda will help you to identify any issues that would benefit from a closer look. This includes:

- Location and soil;
- Load carrying system;
- Building height;
- Design;

- Construction detailing;
- Water damage.

Identify any structural safety concerns that may require further investigation. You may need the support of a qualified engineer or architect to undertake this assessment with you. If any of these conditions apply to your buildings, you will need to investigate further with professional engineering help. As warranted by engineering investigation, develop a strategy for mitigating structural deficiencies through retrofitting or during ongoing remodeling.

## Assessing non-structural safety

If you have prioritized fire, earthquake, flood, and windstorms you will need to take a step further to assess non-structural risks associated with your buildings. This will help to identify those measures that can be taken to make classrooms, offices, and common spaces safer. The review team should include users of each space as well as facilities maintenance staff. Use your imagination and common sense as you go from room to room, and around the building.

**Fire prevention and fire safety** measures are part of your initial school design, and also require regular maintenance and testing. Assess to be sure that:

- Flammable and hazardous materials sources are limited, isolated, eliminated, or secured. This includes electrical lines and appliances, heaters and stoves, natural gas pipes and LPG canisters, flammable or combustible liquids;
- Exit routes are clear to facilitate safe evacuation in case of fire or other emergency;
- Detection and alarm systems are working;
- Fire extinguishers are regularly refilled;
- Other fire suppression and control equipment is regularly tested and maintained;
- Mechanical, electrical, and civil structures and systems are maintained and operable, in compliance with life and fire safety design criteria (IFC EHS Guidelines 2007 p.80).

For **cyclone/high winds safety** think about objects that can be torn away, fly away or be battered by wind outside. Note what can be done, and who should do it.

For **earthquake safety** think about objects that may slide, fall, or fly, and especially anything that can cause injury or block exits. Note what can be done, who should do it, and when it should be completed.

Prioritize the items as follows:

- Priority 1: **secure items that can kill or injure or block exits** (e.g., heavy equipment, heating/cooling units, pipes, storage tanks, overhead lighting, bookshelves, hazardous chemicals, things blocking exits). Note that *all* exit doors should open outwards.
- Priority 2: **secure things can cause significant economic or cultural loss, cause injury, or impair educational continuity** (e.g., computers, audio-visual equipment, school awards, and breakables).
- Priority 3: **secure things that, if damaged, can impede recovery.**

## Assessing capacities and resources for mitigation, response and recovery

Your school community also has many strengths, capacities and resources that need to be identified and mobilized. As you read through this guide you will develop a good grasp of some of the physical protection measures, as well as response and recovery skills and resources that you will need. Make a list of all of these needs. Then, in your school community, identify the people and places with the knowledge,



skills, and provisions you need, and find out how you can activate that capacity to reduce your risks and speed your recovery. Identify resources and problem-solve to fill the gaps. Include name, skills/resources, location and contact information.

In terms of knowledge and skills for risk reduction, think about: structural engineers, environmental engineers, safety experts, facilities staff, handymen, plumbers, electricians, builders. For response and recovery, think about: emergency management experts, health professionals, volunteer groups, scouts, women, organizing volunteers, obtaining supplies, communication experts, shelter construction, and supplies management. Find out what response skills your staff and students already have. Use this assessment to plan for needed training to fill the gaps.

Finally, consider the provisions you will need for response and recovery. As a rule of thumb, collectively as a community you should plan to be able to take care of yourselves for seven days. Between home, school, and work everyone will need four liters of water per person/per day, high energy food. As a school community you will be expected to provide leadership in this. Planning for shelter and sanitation and a site for stockpiling communal supplies are all reasonable expectations from schools.

***Creative problem solving to bridge the gap between needs and resources:*** in one university, a single supplier delivers drinking water to many buildings and departments, but none had extra supplies. The university made a one-time purchase of emergency water supplies. Now the water supplier uses this stockpile to distribute throughout the university, and re-stocks it, so that the university will always have a fresh emergency water supply.

## Using school and neighborhood risk and resource maps

School site map and neighborhood maps are indispensable tools for recording and visualizing risks and resources on your campus and in your community. They will help you recognize and think through how to fill the gaps between vulnerabilities and capacities.

On the School Map mark vulnerabilities and resources such as:

- Entrances and exits
- Visitor check-in point
- Emergency assembly area
- Gas line shut off location(s)
- Electricity shut off location(s)
- Water shut off location(s)
- Building evacuation routes
- Building dangers
- Underground dangers
- Overhead dangers
- Hazardous materials locations
- Fire suppression equipment locations
- First Aid staging area
- Request and Reunification gates
- Individuals with disabilities and young children
- Response provisions on-site



On the Neighborhood Map mark vulnerabilities and resources such as:

- Emergency evacuation routes
- Emergency vehicle routes
- Alternate assembly area, shelters, and safe havens
- Health facilities
- Fire station
- Hazardous materials sites
- Tools (e.g., generator)
- Resource people
- Transportation resources
- Vulnerable populations (elderly, young children)
- Vulnerable building, roads, and facilities
- Resource people for response and recovery
- Response provisions off-site

Post these maps on your school safety bulletin board, and make them part of your staff handbook and staff orientation. Review and revise these maps as you develop and revise your disaster prevention plan.

### ***Contingency planning for educational continuity***

When students are out-of-school for any prolonged period of time, drop-out rates increase, resulting in lifelong negative impacts. Staff unemployment also follows. In addition to all of the steps taken for hazard and resource assessment, physical protection, and response capacity development, you will also need to have contingency plans for how to continue providing education to students as quickly as possible following hazard impact. This is especially true for schools that face recurring hazards such as annual floods. Alternate sites, temporary shelters, delivery of homework packets, radio and television delivery of lessons are just some of the creative alternatives for making sure that education continues. In the post-disaster period, students will also need to participate in recovery efforts, and have time set aside for a variety of psychosocial support activities, and opportunities for communal grief recovery, to ease their adjustment to the sudden losses in their lives. This may include people, homes, jobs, communities and tangible cultural heritage.

Your school, if in good condition, may also be called upon to be used as an emergency shelter, further disrupting education. If you use private services for security, catering and transportation, these companies should be included in your planning process. Have memoranda of understanding ahead of time with engineers who can inspect your building for safety, water pumping equipment providers, and various other contingency steps can be taken in advance and speed your recovery.

## Communicating your plan

School faculty and staff, students, parents, and local community leaders and first responders all need to be familiar with your plans, in order for them to work effectively. Community members have a great deal to offer the school disaster management process, supporting in risk reduction activities, participating in school drills, volunteering during response and recovery, and providing response supplies.

You may want to hold special meetings with local public safety representatives, and an open meeting for your entire school community to communicate your plans and invite participation and support. Communicate this information in as many ways as possible (written, audio, visual, demonstration, and through younger students). Translate as necessary to include everyone.

Staff need to understand your expectations of them. If a disaster occurs, when are they expected to report to work? How they will organize shifts? Which individuals may not be able to stay because young children or elderly family members are at home. Open discussion and realistic planning will help. Everyone will want to know what notification systems you will be using (telephone tree, posted notice on building, radio, automated phone messages, e-mail, school web-page).

Parents need to be knowledgeable and involved. It is essential for disaster preparedness that parents know and trust that their children will be safe and cared for at school, until the danger has passed or outside help arrives, even for two to three days! Let them know, *in advance*, all emergency procedures.

Clearly explain student release procedures to parents, students and community members. Students will be released only to parent/guardian or other pre-authorized emergency contact (who should bring photo identification with them). Provide information about alternate evacuation and reunification site, especially if your school grounds are not likely to be safe because of nearby hazards. Explain that in case of a lockdown, the school will not be able to answer incoming phone calls or make outside calls. Police will provide assistance. No one, including parents, will be allowed near the school. Students will be kept inside and not permitted to leave until the lockdown is lifted by the police. After that, parents may come to school to pick up their children.

As part of this communication process, you should ask parents to provide:

- *Emergency contact information:* in order to implement student release procedures, be sure that parent and emergency contact information is updated at the beginning of each school year and that parents notify the school of changes during the school year.
- *Student comfort bags:* these hold essential supplies each child in case of emergency (see Section 3.C below).

And last but not least, students will be empowered participants in disaster prevention, now and in the future, if they are fully and thoughtfully included in communicating school safety plans.

## 2. Physical and environmental protection

Your plan to reduce vulnerability and risks will need to consider:

- **Structural safety** – this addresses the safety of buildings on or near the school site;
- **Non-structural safety** – this addresses the threats posed by building furnishings and equipment as well as building elements such as roofs, windows, stairs, heating and cooling systems, water storage, pipes, and exit routes. This includes fire safety;
- **Local infrastructure** – this addresses lifeline utilities such as water, electricity, gas, as well as communications and transportation conduits. It also covers transportation safety;
- **Environmental mitigation** – this addresses ambient conditions such as temperature, inundation, hazardous materials release, and climate change impacts.

The dos and don'ts below will assist in identifying and implementing these protection measures.

### **Structural safety maintenance**

While implementation of structural safety measures is beyond the scope of this document, building maintenance is a critical component in the maintenance of structural and non-structural safety. Damage should be repaired as discovered, and structural safety should not be compromised through alteration and misuse. Responsibility for this rests with local school administration and designated facilities and maintenance personnel.

Check to be sure that you:

- Do not compromise columns or beams by cutting, exposing, or making holes in them;
- Do not let reinforcing steel be exposed to air or moisture;
- Do cover exposed steel with concrete mortar;
- Fix wood rot, cracked mortar, cracked bricks, and concrete damage;
- Keep gutters and drainage systems clear of debris;
- Make sure that water and moisture drains away from building;
- Replace broken glass.

## Non-structural safety

Non-structural safety measures are those that are not connected with the weight-bearing system of the building, and those that are in the hands of users. This includes fire prevention and readily available fire suppression equipment. Special attention is required to make sure that all building occupants can safely exit in case building evacuation is necessary. In case of earthquake and storms, the main considerations are injury prevention both within and immediately outside buildings.

Do check that:

- All classroom doors, doors of high-occupancy rooms, and doors to outside open outwards;
- Exit pathways are kept clear;
- Non-structural building elements are securely fastened to the building to resist wind or earthquake shaking;
- Fire suppression equipment is located appropriately and maintained in good working condition;
- Flammable and combustible materials are limited, isolated, eliminated, and separated, away from dangerous interactions and heat sources;
- Electrical systems are maintained and are not overloaded;
- Classrooms have two exits wherever possible. (Sometimes the second exit is a window.)

If you face earthquakes and windstorms:

- Move heavy items below head level;
- Tightly secure tall and heavy furniture and appliance to walls, floors and ceilings. (e.g., use L-brackets to walls or spring-loaded adjustable tension rods to ceiling or wedges under bottom front, or strip barrier fastened to tabletop, as appropriate);
- Fasten cabinet doors and drawers with latches that will hold shut during shaking; Secure heaters and cooling systems suspended inside or outside of building;
- Fasten liquid propane gas tanks, fire extinguishers and other gas cylinders to the wall;
- Protect from glass that may break into large shards (e.g., rearrange furniture, use window film, curtains, or install strengthened glass.);
- Secure heavy and important electronic items to table top or floor using straps and clips, buckles or Velcro;



- Secure lighting fixtures to ceiling;
- Fasten pictures on closed hooks;
- Limit, isolate, eliminate or secure hazardous (poison, flammable) materials.

And for floods:

- Raise important items above possible flood level;
- Limit, isolate, eliminate or secure hazardous (poison, flammable) materials above flood level.

### **Local infrastructure safety**

Local infrastructure includes the water, electricity, gas, heating and cooling systems, communications and transportation systems in your area. These are usually part of larger systems maintained by government and private agencies. Careful design and problem-solving with these organizations, ahead of time, can protect students and educational assets, and make these systems resilient. Depending on the hazards faced, a wide variety of solutions can be considered:

- Relocate overhead wires and poles that may block exit routes;
- Install automatic natural gas shut off valves at building level;
- Use flexible connectors for pipes;
- Consider dangers posed by overhead and underground pipes and depots;
- Replace radioactive lightning rods with those that do not pose health risk.

Transportation safety may involve road and pedestrian crossing conditions as well as operations of school or contractor buses or minivans. On an annual basis, worldwide, transportation accidents are the leading cause of student deaths and injuries. Clear lines of sight and signage, stop signs, traffic lights, clearly marked pedestrian crosswalks, and crossing-guards at busy crossings are all important safety measures. Vehicle safety, driver testing and training, and installation, maintenance, and use of seat belts, and careful routing are all of importance in ensuring that students are safe in school transport. Once on school transportation, rules of access and conduct, and adult supervision are also important factors.

### **Environmental safety**

Environmental safety issues bring schools into focus in their local environments. Thinking through all of the conditions that you face, what are some of the environmental safety issues to explore to increase your own safety?

| Conditions                                | Solutions to explore   |
|---|--|
| Extreme weather during school year        | school design, alternate locations, alternate delivery methods                             |
| Landslide                                 | tree-planting, slope stabilization, retaining wall, evacuation routes                      |
| Forest fires                              | fire breaks  |
| Tsunami                                   | evacuation routes, stairs, ladder  |
| Drought / Food insecurity                 | rainwater harvesting, school gardens, tree planting, food storage                          |
| Solid waste management                    | recycling point  |
| Water and energy shortage and costs       | water and energy conservation  |
| Hazardous materials production or storage | community “right-to-know”, regular review of safety measures, facility tours and dialogues |
| Air pollution                             | walking and bicycling to school, car-pooling   |

There are other ways that your school community can be involved in environmental protection and climate change mitigation—through “green school” measures and through community activities such as environmental clean-up, anti-litter signage, awareness campaigns and similar activities to encourage citizens to reduce, re-use and recycle.

### 3. Response capacity development

The final piece of the puzzle involves the development of response capacity. This includes the systematic organization of response, standard response skills (including basic emergency procedures and procedures for specific hazards), and accessing provisions during an emergency. **Details on each follows.**

#### **Response organization using Incident Command Systems (ICS)**

Response capacity involves knowledge, procedures, skills, and provisions. The most important aspect of response capacity is organization and mobilization of existing skills and resources. A standard emergency management system, such as *Incident Command Systems (ICS)* shown in the diagram at the bottom of this section, can be used as a guiding framework for coordinating the many standard functions that may be called for in different emergency situations.

#### **Incident command systems**

The purpose of ICS is to ensure that the *most help* reaches the *most people*, and to provide a consistent system that staff, students, and emergency personnel can apply in any school, anywhere. Key principles are:

- Standardization – the use of common terminology (and no codes);
- Unified chain of command in order to assign resources for maximum effectiveness;
- Flexible, modular organization, mobilized as needed; and
- Integrated communications.

There are five key functions in ICS that can be mobilized as needed in the particular circumstances. These five functions form a common approach to organize response to any emergency or disaster. Depending on the number of staff and trusted volunteers or capable older-students available, some people may need to have multiple roles.

- **Incident command:** these are **decision-makers** (responsible for/set mission)  
Although someone in your school may be designated as "Emergency Manager" under normal circumstances, in case of actual disaster or emergency, the "Incident Commander" is the first capable person on the scene, until that function can be transferred to a more qualified person or higher authority. Even if normally that person is a Principal or Assistant Principal, several different people should practice in this role, as those individuals may or may not be available during an actual emergency or disaster. The "Incident Commander" mobilizes the on-site "Incident Command Center."
- **Communications team:** these are **communicators** (listeners and talkers)  
The communications team is the right arm of the Incident Commander, establishing connections with education administration, public safety, and emergency management authorities, and with parents and the public, as directed. When communications systems are operational some information can be disseminated using telephone trees, and radio announcements. In large-scale disasters the key communications are with students (often by the school principal or assistant principal, using a megaphone to communicate) and with parents anticipating reunification with students.
- **Operations branch:** these are **doers** (carry out the mission)  
This branch requires a highly organized and well-respected Operations Chief, who manages teams to fulfill: light search and rescue, fire suppression and hazardous materials control, utility shut-off, disaster first aid, psychosocial support, security, and student release/family reunification functions.
- **Logistics branch:** these are **getters/supporters** (support the mission)  
This branch requires a Logistics Chief, who knows the site and its resources best. These teams will find and distribute supplies and provisions, shelter and sanitation, water and nutrition, and organize volunteer recruitment and assignment.

- **Information and planning:** these are **documenters and analyzers** (support the mission)  
This branch is typically mobilized in advance of a disaster, identifying and researching resources, executing memoranda of understanding in advance. During an incident it documents the situation, activities, and assures accurate record keeping.
- **Finance/administrators:** these are **payers** (pay and negotiate)  
This function typically keeps records of resources and staff time expended during any emergency, arranging compensation where permitted, and negotiating as needed for access to needed resources.

ICS is a flexible system that can be activated to different levels, depending on the situation. For example, an intruder on campus, a fight between students, or traffic accident might be handled by activating Level I alone. A small fire or flood might require Level II activation. A major disaster, such as an earthquake might require full activation of multiple teams at Level III. Maintaining this structure allows more responders to be integrated, maintaining the chain of command, and a manageable span of control (i.e., 5–8 people per supervisor). It is *not* normally recommended to have permanent teams with single functions because each situation differs, and may call for more or fewer people on any particular team. As much as resources permit, staff should cross-train. Even if response teams are formed ahead of time, staff should understand and be prepared to assume any response role, as needed. Incident Command Systems are designed to be flexible, and to activate from the top down, only to the level, and only those functions required by the particular disaster or emergency.

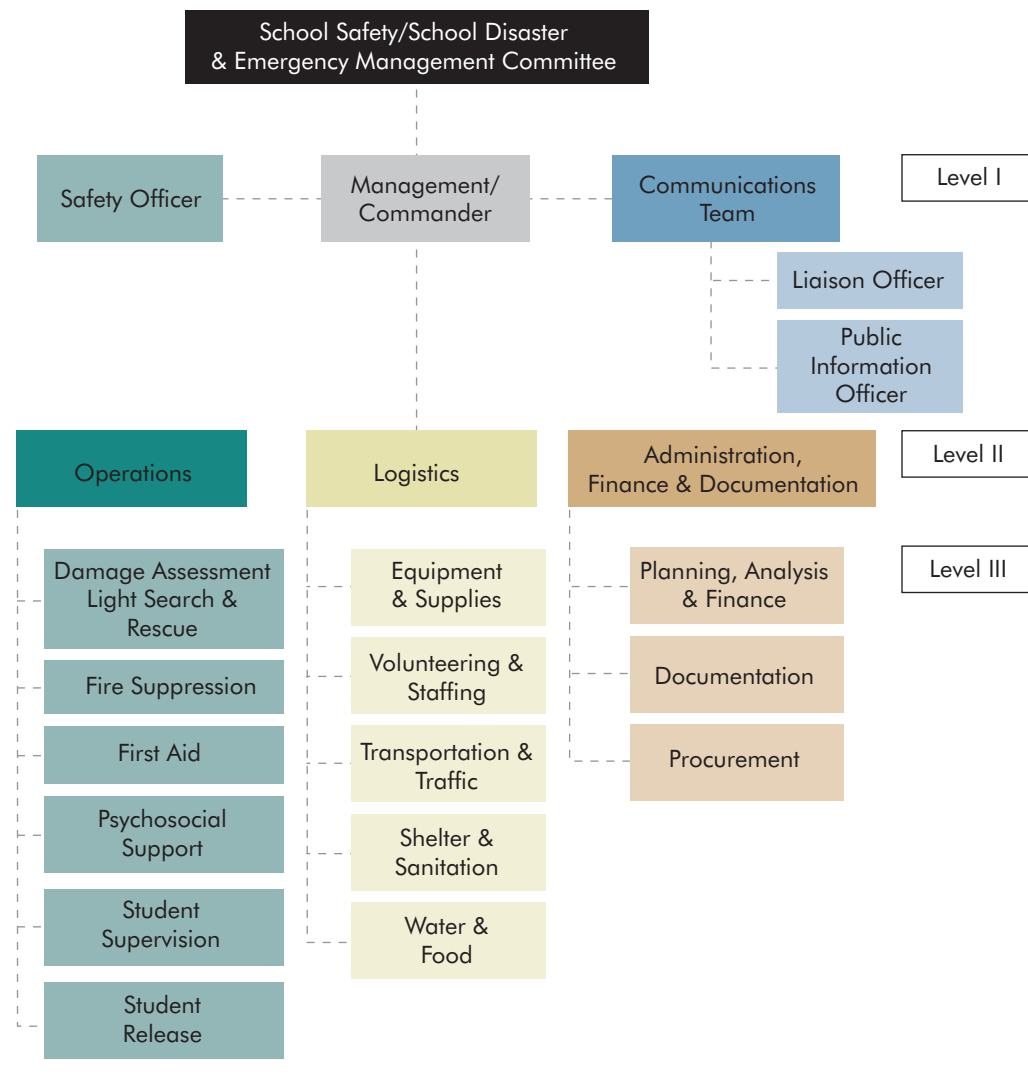
### **Standard operating procedures**

Standard emergency response procedures depend on the hazard, and can and should be customized to your unique circumstances. These are built around six basic emergency procedures detailed below:

- Building evacuation;
- Shelter-in-place;
- Lockdown;
- Assemble and shelter outside;
- Evacuate to safe haven;
- Emergency student release/family reunification.

Each of the procedures is described in detail below. Remember that individuals with disabilities, foreign language speakers and visitors unfamiliar with these procedures may

## Incident Command Systems Organigram



need assistance in following them. The *Emergency Procedures Decision-Tree* that follows illustrates the different circumstances that lead to these six basic procedures.

**Question #1—Is there any warning before the hazard impact?** Is the hazard rapid-onset, without warning (such as acts of violence, earthquake, fire), or is it a slow or medium-onset hazard with some early warning (such as floods, cyclone, winter storms, etc.)? In the case of medium onset events with early warning, school may be closed, and alternate education

delivery methods set into motion. In this case, normal student-release procedures would be applied. In some situations, schools may be the shelter-of-choice for the local community. In the case of violence (person with weapon, terrorist activity) administration should announce a lockdown.

**Question #2—Is the building safe?** The second question is whether the building is safe. If the building is unsafe then **building evacuation** should be immediately triggered. In the case of rapid onset hazards such as fire and earthquake, the building must be assumed to be unsafe, and therefore cautious building evacuation should be automatically triggered. (Note that during earthquake shaking, everyone should “*drop, cover and hold on*” and that evacuation should only begin once the shaking has stopped.) In other situations a rapid assessment can be made before evacuation. If the building is safe then the students and staff should be instructed to **shelter-in-place**. *Reverse evacuation* is practiced for orderly return from assembly area back into classrooms, to shelter-in-place.

**Question #3—Are the school grounds are safe?** If school grounds are safe then **assemble and shelter outside** is the procedure. If school grounds are known to be unsafe (e.g., in coastal area with tsunami risk) then automatic **evacuation to safe haven** should take place. A rapid assessment (e.g., of hazardous materials, fallen power lines, pipeline ruptures) will help decide between these two options.

In all cases, following assembly, reassessment should take place periodically and one of these actions maintained. In the case of real disasters and emergencies incidents, **emergency student release** procedures should be initiated, ensuring that students are returned directly and only to the care of parents/guardians or their pre-designated emergency contacts, and each reunion documented. Students should remain cared for and supervised until the last student is reunited and the *All Clear* is given by the incident commander (explained in the next section). In the case of drills and small events a *reverse evacuation* may be practiced to return to class, prior to “*All Clear*” instruction and resumption of classes.

## Building evacuation, evacuation to safe haven and assembly procedure

**Administration:** sounds fire alarm; makes announcement to students and staff. In case of fire, close doors and windows. In case of hazardous materials, close ventilation system. Activate Incident Command System as appropriate. Monitor and provide updates and instructions as available. Maintain communication. Announce any new procedure. Announce “*All Clear*” when emergency has ended.

**Staff:** *ahead of time*, practice as a class, following both fire and earthquake procedures. Identify any students or staff who may need special assistance during evacuation. Learn from these individuals how best to help them. Teach students how to provide assistance ahead of time. In schools with large numbers of disabled students needing assistance, volunteers should be recruited from the immediate vicinity and trained. Be prepared to help visitors as well.

*At time of alarm or after earthquake shaking stops:*

1. Remind students to follow instructions for building evacuation: “Don’t Talk. Don’t Push. Don’t Run. Don’t Turn Back.” Students should exit with buddies in twos. Check that students or staff needing special assistance have it. Remind students *NOT* to use cell phones, to keep lines free for emergency communications!
2. Take your:
  - Classroom *Go-Bag* or *Go-Bucket*;
  - *Emergency clipboard* or *notebook* with class lists and *Class Status Report Forms* (See *Addenda*);
  - Duffle bag packed with *student comfort bags*.
3. Use the buddy system. Take a few seconds to check briefly with the teacher in the classroom to the left, to the right, and across the hall to see if they are in need. Unless instructed otherwise, evacuate using normal building evacuation routes posted. If you encounter obstructions, such as jammed door, be prepared to take an alternate route. One teacher should be in the front to check that the evacuation route is clear. One responsible student monitor should be immediately behind the teacher, keeping students quiet and orderly. One teacher and responsible student monitor should be at the rear of the group, seeing that everyone is together. Move directly away from the building when exiting. Designated teachers from each wing should check washrooms as they exit.
4. Take your seat in the emergency assembly area (normally, organized by first period or homeroom class). Keep classes separate and take roll. Check again for injuries. If any students are injured, send them with two buddies to the First Aid station, with instructions to return together immediately. For large schools, mount your classroom identification sign at front of group above head level. Fill out your *Classroom Status Report Form* and return it to Incident Command Center with student runner.
5. Remind students about student-release procedures and their purpose to keep them safe. Remind them *not* to use their cell phones in order to keep lines open for emergency. For emergency communication, use SMS only. Keep students occupied as helpers, and in quiet activities during student release (or until all clear signal and return to class).

6. If you are a member of the Search and Rescue, First Aid Team or Fire Suppression Team, have the teacher next to you supervise your class and proceed to the Incident Command Center.
7. Teachers are to remain with their class **AT ALL TIMES. Students must remain seated together as a class.** Periodically call roll as needed. Keep students quiet so that they can hear information from the public address or megaphone/bullhorn system that will be used for announcements. Children are to leave only in the company of reunion gate messengers. The Incident Command Center will provide updates and relieve staff of their assignments.

Note: all personnel without a specific duty or class are to immediately report to the Incident Command Center for instructions. All teaching assistants and campus aides who do not have a class are to report immediately to the assembly area to assist with the supervision of students.

**Evacuation to safe haven:** all schools should designate an alternate site for assembly should school grounds need to be evacuated. Identify evacuation routes ahead of time, and inform parents of this alternate site. Schools that face known risks such as flooding, landslide, debris flow, tsunami, chemical release, or schools that do not have a safe assembly area on-site, should arrange and prepare safe havens ahead of time with emergency supplies. If necessary, also arrange transportation to your safe haven depending on the threats you face, evacuation to safe haven may be automatic (e.g., following earthquake in coastal areas with tsunami threat), or you may wait for evaluation by on-site incident commander and assessment team.

**Reverse evacuation:** there may also be times when it becomes necessary to *go back inside*, because *inside* is safer than outside. Practice *reverse evacuation* at the end of your drills, when you go back to your classrooms, following all of the same rules.

**N.B. Always assume and act as though an alarm is signaling a real threat.** Whether an alarm is a real situation, a drill, or even a false alarm, safety demands that you practice your response procedures as though it were real event!

## Shelter in place procedure

You may be requested to shelter-in-place when there are dangers outside the school that prevent normal student release, such as severe weather or flooding, nuclear, biological or chemical incident or terrorist attack. Shelter-in-place is appropriate when evacuation is not



necessary, or when there is not time to evacuate. It should be announced throughout the school using a public address system or face-to-face communication.

**Administration:** 1. Activates Incident Command System as needed. 2. Announces to students and staff to stay in, or return to indoor shelter areas. Close all doors and windows, if appropriate. Turn off ventilation system, if appropriate. Monitor and provide updates and instructions as available. Announce "All Clear" when the emergency has ended.

**Staff:**

1. Clear the halls of students and staff immediately and report to nearest available classroom or pre-designated shelter locations inside the facility.
2. Teachers keep your emergency go-bag or bucket and notebook or clipboard with you.
3. Assist those with special needs.
4. Close all windows and doors and lock entrances, if appropriate.
5. Seal the room from outside air infiltration, shutting off heating, ventilating or cooling system, if appropriate.
6. Take attendance and turn in *Class Status Report Form* to Incident Commander when safe to do so.
7. Turn on radio/TV and monitor for further information or instruction.
8. Have students leave their cell phones on their desks. In generalized disasters it is important to keep lines open for emergency. Keep students occupied as helpers, and in quiet activities during student release (or until all clear signal and return to class).
9. Stay where you are until instructed otherwise by school authorities.
10. Create a schedule for learning, recreation, eating and sleeping.

## Lockdown procedure

Lockdowns are called for when there is a violent intruder or person with weapon, if a threat of violence or other crisis occurs inside or outside the school and if moving around or evacuation would be dangerous. A distinct loud siren or alarm should be used to signal immediate lockdown.

**Administration:** sound lockdown signal and announce: "Attention—There is an intruder in the building. Initiate lockdown procedure." *Do NOT activate fire alarm!* Take cover. Activate Incident Command and prepare to transfer command to police or public safety authorities. Monitor situation. Reassess and provide updates and instructions as available. Public safety

authorities will return command to you when it is safe to do so. Following incident inform students and parents, as appropriate, providing time for review and discussion.

**Staff:**

1. Gather students into classrooms, maintaining calm. Try to warn other faculty, staff, students and visitors to take immediate shelter. If you are outside the building proceed immediately to a secure area, away from the threat.
2. Close and lock the doors from inside. Stay out of sight and stay away from doors and windows. Wherever you are, turn all available desks and/or tables onto their sides facing the hallway and/or outside windows, if necessary.
3. Instruct students to drop and cover behind the desks making themselves as small a target as possible. Do *not* close coverings on outside windows.
4. Turn off lights and turn off radios and other devices that emit sound. Silence cell phones.
5. Stay where you are until instructed in person by police or school authorities.
6. Follow instructions to continue class and/or use Disaster and Emergency Student Release procedures.

## Emergency student release procedure

Disaster and emergency student release procedures are intended to ensure that students and families are safely reunited, following any unsafe or unusual circumstances. In the event of an emergency or disaster, students under the age of 16 should not be permitted to leave school except in the company of an adult approved by parent or guardian.

**Parents:** provide and maintain an updated *List of Emergency Contacts* for their child. This should include parents or guardians and two or three trusted relatives or friends nearby who will be nearby or come to collect student in case of emergency. In the event of emergency or disaster, the student will only be released to persons on this list or authorized by persons on this list.

**Administration:** ensures that *List of Emergency Contacts* for each student is updated by parents at the beginning of the school year, and can be updated by parents at any time. Maintains the current copy of student emergency contacts in administration office “Go-Box”, and annually in the school emergency supplies bin.

**Teachers:** make sure that both students and parents are familiar with student release procedures for emergencies and disasters.

**Reunification Team:** greets parents and emergency contacts at request gate, providing them with *Student-Family Reunification Form (permit to release child)* form to fill out. Verify that the adult picking up the child is listed on the *List of Emergency Contacts* and verify their identity. Reunites students at reunification gate. Keeps signed copies of *Student-Family Reunification Forms* in order to respond to any query. Organizes *request* and *reunification* functions for maximum efficiency and safety.

## Hazard specific response procedures

### General:

**Visitor registration:** to protect visitors from all hazards, and to protect students and staff from intruders, schools must maintain a single entrance and registration system with name-tags for visitors, so that staff and students will know that unfamiliar people have identified themselves before moving around on campus. Communicate these rules widely and assist visitors in the registration process.

**Emergency calls:** when calling for police, ambulance, fire or other emergency services be prepared to describe WHAT, WHEN, WHERE, WHAT is happening, WHO you are and how to call you back. Do not hang up until told to do so. For personal safety you should program a next-of-kin phone number under the name “ICE” in your cell phone. This is the universal name for “In Case of Emergency”.

**Medical emergency:** provide immediate medical care and call ambulance if necessary.

**Threats of Violence:** violent incidents at school are not impulsive, random, or epidemic. Prior to most incidents the attacker told someone about his/her idea or plans. There is no accurate profile of a violent offender. Some, but not all violent students have social difficulties, and there are many motivations for violence. Prevention can be achieved by building a climate of trust and respect between students and adults. School should provide a place for open discussion where diversity and differences are allowed and communication is encouraged and supported. Attention must be paid to students’ social and emotional as well as academic needs.

Whenever any threat is made, *do not* ignore them, and do not over-react. Threats of violence may be: *direct*— specific act against a specific target identified in a clear and explicit manner; *indirect*—vague, unclear, ambiguous or implied violence; *veiled*—implied but not explicitly a threat; *conditional*—warning of violence, if terms are not met (e.g., extortion). A professionally-trained threat assessment team may need to evaluate whether the threat

poses low, medium or high risk, considering student behavior, personality, school, social, and family dynamics.

- ***If there is a suspicious or unknown persons.*** If you sense a threat, ask a colleague for immediate help. If you feel threatened trust your feelings. Keep distance. Use assertive verbal language and strong body language. Call police as necessary. Call for immediate *lockdown* if necessary.
- ***If you encounter bullying.*** School culture should not tolerate bullying and anyone witnessing or experiencing bullying should feel comfortable reporting it and knowing that adults will follow up. Supportive family intervention may be needed for both victims and perpetrators of bullying. For more information see <http://www.stopbullyingnow.hrsa.gov/kids/>
- ***If there is a fight among students.*** Call or send someone to the office. You are *not* required to physically intervene. Identify yourself and instruct combatants to stop. Call them by name, instruct spectators to move away. Keep track of events for subsequent report. Dispatch staff to control and disperse onlookers.
- ***If there is a person with a weapon.*** Call or send someone to office. You are *not* required to physically intervene. Try to remain calm. Try not to do anything that will provoke an active shooter. The threat may be high, medium or low risk depending on many factors. One staff member should call police and describe the situation: e.g., static (intruder barricaded somewhere) or dynamic (moving around), any injuries to staff or students, number, location and description of intruders. Also report suspicious devices, with description and location.
- ***If there is a bomb threat.*** Stay calm. Keep caller on the line. Do not upset the caller. Indicate your willingness to cooperate. Do *not* pull fire alarm. Signal silently to co-workers to call police, *immediately*. Permit the caller to say as much as possible without interruption. Take notes on everything said including observation of background noise, voice characteristics, language, etc. Ask as many specific questions as possible. Upon hanging up immediately initiate caller ID if available. Speak with Police. Write everything down. Police will advise if building evacuation is necessary. If so, administration should announce *building evacuation*. Staff should make a visual check of classroom or immediate area. Anything suspicious should be reported immediately but not touched. School personnel should not handle, search for, or move a suspected bomb. Classroom teacher should evacuate immediate vicinity of any suspicious object. Do not use radios, walkie-talkies or cellular phones to avoid accidentally triggering an explosive device. Staff nearby should turn off stoves, equipment, and gas supply to building. Do not return to the building again until police, fire personnel or administration give the "all clear."

- **When you are in transit.** When traveling to and from school, to reduce vulnerability to random acts of violence, staff and students should use well-travelled, open routes. Walk assertively and be alert to everything around you, and travel with a buddy or escort, especially at night. There may be some circumstances when authorities advise people to vary their routes, to avoid being targets of attack. Avoid dangers by getting away quickly. Scream loudly for help “Call the Police.” A variety of professional and community security patrols may all be important to increasing personal safety.

### Fire:

- **If you see a fire.** Put out small fires with fire extinguisher or cover source of fuel with blanket. For modern fire extinguisher use, remember “P.A.S.S.”: *Pull* safety pin from handle. *Aim* at base of the flame. *Squeeze* the trigger handle. *Sweep* from side to side at the base of the flame. Shut off source of fuel if safe to do so (e.g., gas). Activate fire alarm. Alert others. Call emergency telephone number and report location of fire. Evacuate building. Close doors and windows.
- **If you hear a fire alarm.** Treat as a real emergency. Follow building evacuation procedures. Never open a closed door without checking first for heat. Do not open a hot door.
- **If you are caught in smoke.** Drop down on knees and crawl out. Breathe shallowly through your nose. Hold breath as long as possible. Use damp cloth over mouth and nose.
- **If trapped in a room by fire.** Block smoke from entering with damp cloth, under door. Retreat closing as many doors as possible. Signal and phone your location.
- **If a person or their clothing is on fire.** Stop where you are. Drop to ground. Roll over. If another person is on fire, push them down, roll them and/or cover with blanket, rug or coat.

### Earthquake.

**During the shaking:** at first indication of ground shaking, instruct loudly: “Earthquake position: Drop, Cover and Hold On.” When the shaking is over, evacuate outdoors, away from the building.

- **In classrooms,** the person closest to the door should open it fully. Anyone near an open flame should extinguish it. DROP down on your knees and make yourself as

small a target as possible. COVER your head, neck and face. GO under a sturdy desk or table to protect your head and neck and as much of your body as possible. HOLD ON to your cover. Stay away from tall and heavy furniture or heavy equipment, and overhead hazards. Do not use elevators.

- **In a wheelchair**, lock it and take the “brace position” covering head and neck. If in stadium seating, take the brace position in your seat.
- **In science labs and kitchens**, extinguish burners and close hazardous materials containers and/or place out of harm’s way before taking cover. Stay away from hot stove, overhead cabinets and from hazardous materials that may spill.
- **Inside in open areas**, where no cover is available, move towards an interior wall and away from falling and overhead hazards. Drop, Cover and Hold, protecting you head and neck with your arms.
- **In library, workshops, performance areas and kitchen**, move away from shelves, books and instruments if possible.
- **In stadium seating**, take the “brace position” until the shaking stops. Follow ushers instructions for orderly evacuation.
- **Outdoors**, move away from buildings, walls, power lines, trees, light poles and other hazards. Drop down to your knees and cover your head and neck.
- **In school transportation**, driver should pull over and stop the vehicle, away from overhead hazards. Take the “brace position.”

**During an aftershock**, take the same protective measures as during the shaking.

**After the shaking stops**, in case of moderate or severe earthquakes, before you exit your room, check around you for anyone injured. Administer life-saving first aid (open airway, stop serious bleeding, treat for shock). Ask responsible students to assist lightly injured. If a severely injured or trapped individual is inside, make them comfortable. Give them a whistle and comfort item and reassure them that search and rescue team will come for them. If staying would be dangerous, non-ambulatory injured should be transported with class. Put out any small fire. Take ten seconds to look around and make a mental note of damage and dangers to report. Mark your door with either green “All Out” sign or red “HELP!/ DANGER!” sign. Leave your doors unlocked. Check for safe exit routes and then carefully evacuate building, moving away from the building.

**Tsunami.** Evacuate in case of tsunami early warning, or felt-earthquake, to previously-selected *safe haven* at higher ground and away from coast.

**Storm.** Follow early-warning instructions. Shelter-in-place.

- ***If you are indoors***, stay off all telephones. Telephone lines can conduct electricity. Unplug televisions, computers and other appliances. Lightning can cause power surges and travel through electric lines. Stay away from running water in faucets, sinks and bathtubs. Electricity from lightning can come inside through plumbing. Close window coverings, then stay away from windows. Listen to weather advisories on a battery-powered radio. Obey advisories promptly.
- ***If you are outdoors***, plan ahead. Know where you'll go if an unexpected thunderstorm develops. Monitor weather conditions and be prepared to take immediate action to get to a safe place before the thunderstorm arrives. If you are boating or swimming, get to land, get off the beach and find a safe place immediately. Stay away from water, which can conduct electricity from lightning. Go to safety in a permanent, closed structure, such as a reinforced building. If there are no reinforced structures, get into a car or bus, keeping windows closed. Keep your hands on your lap and feet off the floor. If you are in the woods, find an area protected by a low clump of trees. Never stand under a single, large tree in the open. As a last resort, go to a low-lying, open place. Stay away from tall things—trees, towers, fences, telephone poles, power lines. Be aware of the potential for flooding in low-lying areas.
- ***If you feel or see lightning***, (Note: if you feel your hair stand on end, lightning is about to strike.) squat low to the ground *on the balls of your feet* so that the charge can go through you back into the ground. Place your hands over your ears and bend your head down. Make yourself the smallest target possible. Do *not* lie flat on the ground!
- ***If lightning strikes a person***, call for help. Get someone to dial 9-1-1 or your local number for Emergency Medical Services (EMS). A person who has been struck by lightning needs medical attention as quickly as possible. Give first aid. If the person has stopped breathing, begin rescue breathing (if you are properly trained). If the person's heart has stopped beating, someone trained in CPR should administer it. Look and care for other possible injuries and check for burns. Move the victim to a safer place. Remember, people struck by lightning carry no electric charge, and they can be handled safely

**Flood.** Follow early-warning instructions. Evacuate to higher ground or shelter-in-place.

- ***Slow rise flooding***: Given sufficient notice to evacuate prior to flooding, protect records and electronic equipment as best as possible. Take normal actions for building evacuation and proceed to safe haven.
- ***Sudden severe flooding***. Evacuate all affected spaces immediately. Relocate to a safe place on the upper floors of the building, taking Go Bucket or Bag and emer-

gency notebook or clipboard with you. Do NOT try to wade through flood waters of any depth. Do NOT try to leave the building in a car. If you must evacuate, wear life-jackets or similar flotation devices.

**Hazardous Materials Release.** Evacuate upwind to safe haven or shelter-in-place, closing and sealing windows, air-ducts.

- **Chemical spills or suspicious materials.** If possible, limit release at the source and contain the spill. Shut down equipment. Evacuate the immediate area. If danger extends beyond immediate area, pull fire alarm and follow the *building evacuation and assembly procedure*. First witness of the hazardous materials leak/spill: call emergency telephone number give details of materials and location, and number of people in the vicinity.
- **Gas leak. Do not pull fire alarm**—this could cause an explosion. Leave the area and call emergency telephone number. Issue alert using public address system or door-to-door. Evacuate the building following *building evacuation and assembly procedure*.
- **Explosion.** Drop and cover under desk, tables or other furniture that will protect you against flying glass and debris. When it is safe refer to the Emergency Call Section and immediately report an explosion. Leave doors open to permit exit, if building is damaged. Stay away from outside walls and areas where there are large pieces of glass and/or heavy suspended light fixtures. Standby for further instructions from your incident commander.

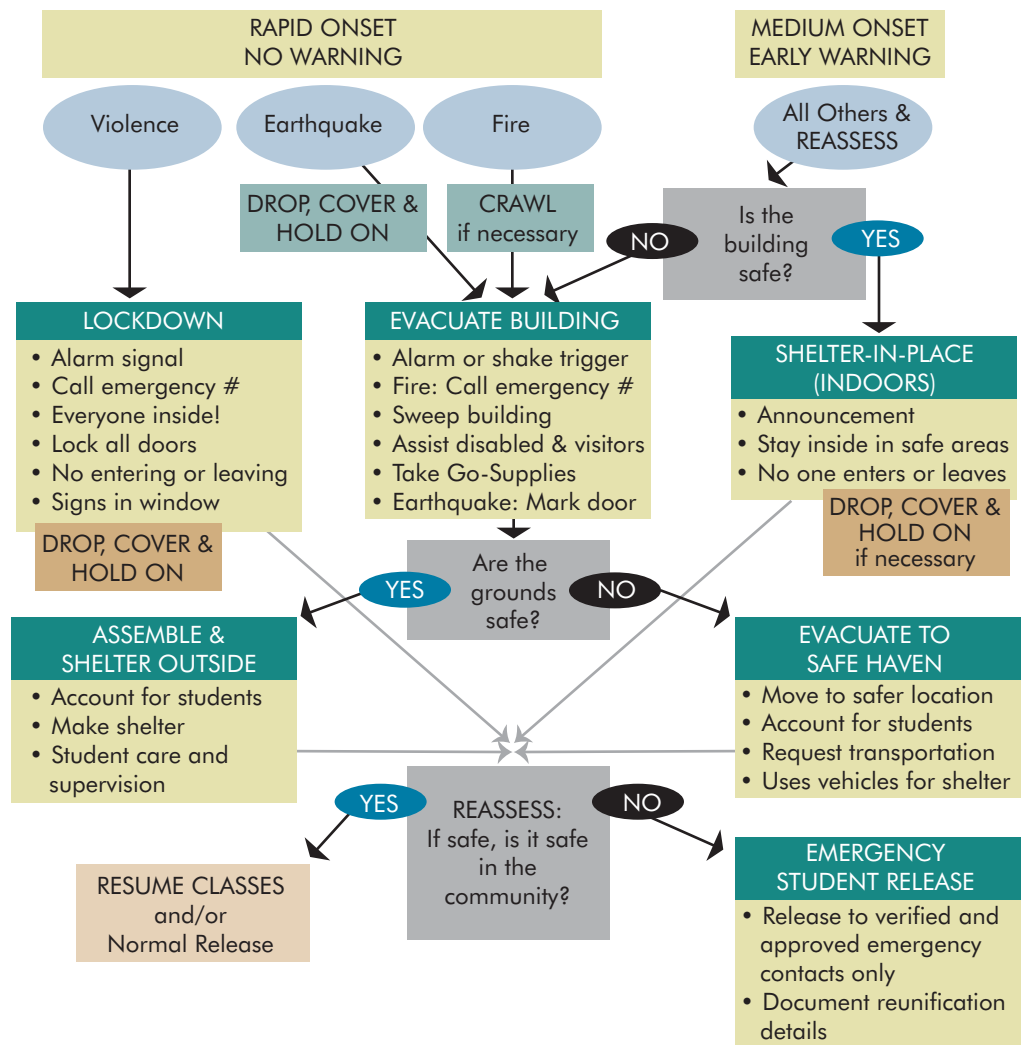
## Response skills

Response skills associated with different roles in Incident Command Systems are described below. Many of your staff will already have some of the response skills described below. Many more skills can be learned from online self-study programs. You can also find training resources in your local community from fire department, civil defence, Red Cross or Red Crescent national society, and other resources. Make an annual staff training plan, to fill in any gaps in the response skills that you will need. Many schools have found that as staff acquire these skills and practice them during drills, they can pass them on to new staff through regular 30-minute, small-group training sessions.

The **Incident Commander** *is responsible for directing emergency operations and shall remain at the Command Post ICC to observe and direct all operations. The IC will normally be the school principal, assistant principal or their designee. In the absence of the normal IC, anyone may assume the duties of the IC until someone more qualified can take over.* Responsibilities include:



## Emergency Procedures Decision-Tree



- Begin and end emergency response;
- Assess type and scope of emergency;
- Determine threat to human life and structures and need for outside assistance;
- Set up command post (“incident command center”);
- Set up and coordinate emergency assignments as needed.

**Communications team** responsibilities include:

- Report to the Incident Commander;
- Support Incident Commander by facilitating and delivering communications;

- Set-up public address system;
- Use cell phone short messages, walkie-talkies, messengers and any other means needed to communicate between school, emergency services and district office as needed;
- Relay official communications from IC to staff and students in assembly area, and parents and public as needed.

The **Operations Branch Leader** responsibilities are to:

- Open emergency supplies bin;
- Mobilize operations teams as needed and assign and supervise operations team leaders;
- Maintain contact with Incident Command Center;
- Receive reports from team leaders;
- Maintain list of fires discovered and status;
- Receive list of missing/unaccounted students.

**Fire suppression/Light search and rescue/Damage assessment and utilities control teams** are expected to immediately assemble at the emergency supplies container to obtain safety equipment. Responsibilities are:

- Extinguish small fires immediately with distributed fire suppression equipment by all trained staff or older students without waiting for mobilization;
- Place rescuer safety first. Use good judgment in each situation;
- Three-member teams to search assigned areas by building and floor and check for missing students;
- Three-member teams to check and turn off utilities as needed and assess damage;
- Check every room in the assigned buildings looking for any person(s) who are hurt or need rescue assistance. Begin on the first floor and work up;
- Ensure everyone is out of the building(s). Escort people out of building in normal manner via stairs, halls, and doorways whenever feasible. Send stragglers to the assembly area;
- Place an “X” with chalk on doors of empty rooms;
- Provide first aid on site, as long as you are not in danger;
- Transport non-ambulatory injured to first aid treatment area, only if it is dangerous to remain;
- Spend no more than one minute with each found victim;
- Record the location of victim on emergency response team log;

- Report findings to Operations Chief (with walkie-talkie if possible);
- Additional teams to be on standby to deploy as needed based on assessment reports.

**First aid and Psychosocial support team** responsibilities are:

- Set up first aid area in a safe place;
- Secure first aid supplies;
- Triage for life-saving: prioritizing quick check to open airways, stop bleeding and treat shock;
- Coordinate with search-and-rescue teams;
- Determine need for emergency medical assistance;
- Administer first aid as needed;
- Keep record of types of injuries and aid provided;
- Provide psychological first aid and establish buddy system to support students or staff in need;
- Keep log of students dispatched for emergency medical assistance and that need follow-through and referrals.

**Assembly area team** Team leader responsibilities are:

- Send student status report forms from teachers, reporting any injured or missing students immediately;
- Communicate with Incident Command Center attendance accounting team;
- Keeps all doorways, hallways, and stairwells safe and clear;
- Implement “buddy” system with neighboring teachers/staff;
- Help runners locate students being picked up and direct them to the “Reunion Gate.”

Team members responsibilities are:

- Take roll and re-check students from time to time, reporting status to the Incident Command Center;
- Supervise and reassure students throughout the duration of the emergency;
- Conduct recreational and educational activities to maintain order and calm;
- Provide water and snacks to help calm the students.

**Student-family reunification team** responsibilities are:

- Make sure that request and reunification gates are clearly marked overhead and that there is a sign in the front of the building directing parents to the request gate.

***At request gate:***

- Greet and direct parents/guardians through the request process;
- Provide parents with student-family reunification form (permit for release of child) to be filled out;
- Verify authorization on “student emergency contact” cards;
- Request identification. If parents or guardians are known to staff or positively identified by student, this may be used in lieu of official identification, subject to approval of administrator;
- Keep the top portion of the form at the request gate filed in alphabetical order;
- Locate child using student schedule location roster and identify location in emergency assembly area;
- Send a runner with the middle portion of the form to locate the student in the assembly area;
- Give the bottom portion of the form to the parent/guardian and direct them to the *reunification gate*;
- If a second person comes to find the same student, check request form and direct parent to the reunification gate for detailed information.

***At reunion gate:***

- Match request form with student. Request identification. In the case of discrepancies request adult to return to request gate.
- If a second person comes to find the same student, verify that the student was picked up, when and by whom.

The **logistics branch leader’s** responsibilities are:

- Immediately lock all external gates and doors—secure campus;
- Report to incident commander;
- As needed, mobilize individuals to obtain equipment and people to support the operations branch;
- Monitor gates and open for emergency vehicles, and direct first responders to area of need;
- Post signs as needed;
- Direct parents to the “request gate”;
- Check utilities and take action to minimize damage to school site;
- Assess damage to site and report findings to incident command center;
- Establish morgue area, if needed;

- Work with the cafeteria and ICC to distribute resources such as water, food, power, radio, telephones, and sanitation supplies;
- Seek help to create shelter, sanitation and nutrition teams as needed.

## **Shelter and sanitation team**

### **Sanitation:**

- Students will use gym and field restrooms, if they are safe and water is available;
- Supplies should also be pre-positioned in emergency storage container;
- Privacy screens can be made from be large cardboard appliance containers cut in half vertically to make a “v-shaped” screen, or made with dark sheets and ropes. Separate facilities may be needed for girls and boys;
- To collect waste you may either dig holes, and cover with sand or dirt periodically, or use buckets and plastic bags.

### **Shelter:**

- In case of inclement weather, if gymnasium is safe, students will be brought inside;
- If building is not safe, alternative IC will seek alternate location. Blankets kept in the emergency shed will be used;
- Provide water and food for those people detained beyond meal times;
- Water and food stocks should both be stockpiled and rotated into regular use on an ongoing basis.

## **Response provisions**

In case of the need for building or site evacuation, there are some key supplies that need to be ready to take with you. These same supplies will be needed if you have to shelter-in-place. The checklists provided in the Addenda recommend supplies to be maintained by administration, nursing office, in each classroom, and schoolwide.

The school **administration office “go-box”** should staff and student class roster and schedules, and for elementary and secondary schools it should contain Student Emergency Contact Cards, and student check-in and absentee log and daily visitors log, school site map, important phone numbers, keys, and office supplies.

The **nursing office go-box should** contain student prescription medications and first aid supplies. School first aid kit contents should be appropriate to the size of your school. [http://en.wikipedia.org/wiki/First\\_aid\\_kit](http://en.wikipedia.org/wiki/First_aid_kit)

Each classroom should have a **classroom “go-bag” or “go-bucket.”** These “evacuation supplies” should be taken on field trips, and can also be used in case of lockdown or shelter-in-place (where the bucket can serve as a makeshift toilet). Each room will also need an **emergency clipboard or notebook** that can be hanging on a hook at the exit, or placed inside the “go-bag.” This should be updated at the beginning of each school year and in preparation for school drills.

**Student “comfort-bags” should be requested from parents and kept in a duffle bag or backpack in homeroom classes, ready at exit. Parent-teacher association may want to assist in assembling these items, particularly for those who many not be able to afford them.** Parents can also be asked to donate one blanket per child to the school, which will be kept in the emergency supplies container (see below).

**School emergency supplies** should be located in a container or bin, stored outside the main school buildings. The contents should include a supply of water (approximately 4 liters of water per person per day—half drinking, half sanitation). This may be used by the school or community, if the school is utilized as a shelter. It should include communication devices, and as needed, vests and hardhats for response team members, shelter supplies, WC privacy screen, and light search and rescue supplies if needed.

**Response teams** will need access to several copies of your **disaster response team notebook** containing school and assembly area maps, master list of students, faculty/staff roster, school disaster and emergency response matrix, incident command system responsibility notes, and basic and specific emergency procedures. Teams will also need access to table, chairs, desk supplies.

## 4. Practicing, monitoring, and improving

### ***Hold simulation drills to practice, reflect upon and update your plan***

School drills should be tailored to expected hazards. Every school should conduct at least 3 fire drills per year, and at least one full simulation drill. Schools in earthquake or flood prone areas should also practice for these hazards. For every drill that you perform *with* a prior announcement, be sure to perform one *without* a prior announcement. Try them with different scenarios, at different times of the day. Try them when the school principal is there and when he or she is not there. The purpose of a drill is to prepare for the unexpected, so if you make it too easy, you won’t learn how to adapt to the real situation. Drills should always be treated as “the real thing.”

Good drills are a learning process. They begin with advance preparation by staff, providing an opportunity to train students in classroom groups, remember procedures, and check on provisions. The simulation itself is an experiential learning opportunity. Following

the drill, students can debrief with teachers in the classroom. An “all school” faculty and staff meeting is an important way to debrief, and to discuss ways to improve upon both mitigation measures and response preparedness. The most important part of any drill is the discussion and the updated action plan that comes from the experience.

### ***Monitoring indicators for school disaster management***

The *School Disaster Readiness and Resilience Checklist* (see Addenda) is offered to guide your reflection on your own progress in implementing school disaster management policies and procedures. It is most rewarding to use this at the beginning of your efforts, to establish your “baseline”, and then to repeat this check once a year to measure your progress. These can also be used during preparation for and reflection after school drills, to focus your continuing efforts to ensure the safety of students and school personnel, and assure educational continuity.





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# Addenda:

**Comprehensive School Safety  
School Disaster Readiness and Resilience Checklist  
Risk Assessment Matrix  
School Building Safety Checklist  
Family Disaster Plan  
Drill Scenarios  
Drill Preparedness Checklists  
Class Status Report Form  
Student Family Reunification Form  
Emergency Provisions Checklists**

## Comprehensive School Safety

### Goals:

The goals of comprehensive school safety in the face of expected natural and man-made hazards are:

- Student and staff protection;
- Educational continuity; and
- Development of a culture of safety.

### Objectives:

These three goals are accomplished through three overlapping spheres of activity:

1. Safe school buildings;
2. Disaster prevention education;
3. School disaster and emergency management.

**Safe school buildings** is addressed in the GFDRR/INEE publication, *Guidance Notes on Safer School Construction* (2009), available in several languages: [http://www.ineesite.org/index.php/post/safer\\_school\\_construction\\_initiative/](http://www.ineesite.org/index.php/post/safer_school_construction_initiative/) or <http://www.preventionweb.net/english/professional/trainings-events/edu-materials/v.php?id=10478>.

In the project development process (new construction, retrofit, and/or remodeling) many of the most critical issues related to school site selection, design for hazard-resilience, and supervised construction should have been addressed. However, the sustainability of safety, the maintenance of school facilities, and the responsibility for educational continuity, rest squarely with the administration and authorities to whom the building is handed over.

**Disaster prevention education** is addressed in the companion publication, *Disaster and Emergency Preparedness: Activity Guide for K-6th Grade Teachers (IFC 2010)* that provides suggested activities for introduction of basic disaster awareness and prevention at an age-appropriate level for primary school students. Integrating disaster prevention knowledge and action into students' education at school is of critical importance to building a long-term and sustainable "culture of safety" <http://www.preventionweb.net/english/professional/trainings-events/edu-materials/v.php?id=13988>.

The subject of this handbook, school disaster and emergency preparedness, falls in the middle (yellow) sphere below. *Emergency and Disaster Preparedness: Guidance for Schools*(2010) is the area that is at the core of "sustainability" of comprehensive school safety. It addresses all of those risk reduction, preparedness and response issues that must be

addressed and implemented at the local school level, by the school community. <http://www.preventionweb.net/english/professional/trainings-events/edu-materials/v.php?id=13989>.

There are also policy issues to be addressed by education authorities at all levels. The international *Interagency Network for Education in Emergencies' (INEE), Minimum Standards Handbook*, for education in disasters, addresses emergencies from prevention through to recovery. They are designed to ensure that communities are meaningfully involved in the design and delivery of education programs in emergencies, that efforts are coordinated, accountable, and support the education sector in "building back better." [http://www.ineesite.org/index.php/post/inee\\_minimum\\_standards\\_overview/](http://www.ineesite.org/index.php/post/inee_minimum_standards_overview/). These are a companion to the SPHERE Project's Humanitarian Charter and Minimum Standards in Disaster Response, <http://www.sphereproject.org/>.

Policy issues for education-sector decision-makers are also addressed in *School Disaster Prevention: Guidance for Education Sector Decision-Makers (2008)*, <http://www.preventionweb.net/english/professional/publications/v.php?id=7556>.

Running through the implementation of each of these objectives are the familiar themes of community participation, coordination, and accountability. These objectives are consistent with effective approaches to any social and environmental management system and are intended to extend these principles beyond the initial project stage, throughout the life of the institution.

This approach to *comprehensive school safety* follows from IFC's performance standards for all projects, especially to those objectives related to risk reduction, safe working conditions, and community health and safety. The guidance here is intended to complement recommendations for emergency plans for response and preparedness outlined in Environmental Health and Safety Guidelines. <http://www.ifc.org/ifcext/sustainability.nsf/Content/EHSGuidelines>

## School Disaster Readiness and Resilience Checklist

1. School Disaster Management Committee guides the School Disaster Management Process
  - An existing or special group representative of all parts of the school community is tasked with leading school disaster management efforts on an ongoing basis.
  - School disaster management has the full support of school leadership.
  - School disaster management committee takes lead in ongoing planning for prevention, mitigation, response and recovery.
  - School disaster and emergency management plan is reviewed and updated at least annually.
2. Assessment and Planning for Disaster Mitigation Hazards, vulnerabilities, risks, capacities and resources are researched and assessed.
  - Mitigation measures are identified and prioritized for action.
  - Building evacuation routes and safe assembly areas are identified.
  - Area evacuation and safe havens for family reunification are identified, as needed.
  - Educational continuity plans are in place for recurring hazards and high impact hazards
3. Physical protection measures are taken to protect students and staff
  - School buildings and grounds are maintained for disaster resilience.
  - Fire prevention and fire suppression measures are maintained and checked regularly.
  - Safety measures related to building non-structural elements, furnishings and equipment are taken to protect students and staff from hazards within the building (especially caused by earthquakes, severe weather etc.).
4. School personnel have disaster and emergency response skills and school have emergency provisions
  - School personnel are ready to organize disaster response using a standard emergency management system (e.g. incident command systems).
  - School personnel receive training in a range of response skills including, as necessary: building and area evacuation, first aid, light search and rescue, student supervision, shelter, nutrition and sanitation.
  - School maintains first aid supplies and fire suppression equipment.
  - School maintains emergency water, nutrition and shelter supplies to support staff and students for a minimum of 72 hours.

5. Schools have and practice policies and procedures for disasters and emergencies
  - Policies and standard operating procedures adopted to address all known hazards.
  - Standard operating procedures include: building evacuation and assembly, shelter-in-place, lockdown, and family reunification procedures.
  - School personnel have and practice procedures to ensure safe student reunification with emergency contacts identified in advance by parents or guardians.
  - School drills are held at least twice yearly to practice and improve upon disaster mitigation and preparedness skills and plans.

## Risk Assessment Matrix

| A. Hazards | B. Hazard Likelihood<br>0 low – 5 is high | C. Impact Severity<br>(vulnerabilities/<br>resources)<br>0 is low – 5 is high | D. Risk Score<br>B x C | E. Priority |
|------------|---|---|------------------------|-------------|
|            |   |   |                        |             |
|            |   |   |                        |             |
|            |   |   |                        |             |
|            |   |   |                        |             |
|            |   |   |                        |             |
|            |   |   |                        |             |
|            |   |   |                        |             |
|            |   |   |                        |             |
|            |   |   |                        |             |

In Column A, enter all of those hazards from the list below that may affect your community or your school. You may need to research these with local disaster management authorities.

- |                                |  |   |
|--------------------------------|--|---|
| <b>Potential Hazards:</b>      | Avalanche  | Playground, workshop or laboratory accident |
| Earthquake                     | Landslide  | Student road accident                       |
| Flood                          | Debris Flow  | Student illness/epidemic                    |
| Fire                           | Volcano  | Food poisoning                              |
| Winter Storms/extreme cold     | Hazardous materials release                          | Student fight                               |
| Hurricane/cyclone/typhoon      | Transportation accident (e.g., train, ship, highway) | Student with weapon                         |
| Tornado                        | Water shortage                                       | Student suicide or attempt                  |
| Lightening                     | Power shortage                                       | Civil unrest                                |
| Heat Wave                      | Food shortage  | Terrorism                                   |
| Drought                        |  | Other (specify)                             |
| Pandemic (e.g., HIV/AIDS, flu) |  |   |



In Column B, the likelihood of occurrence of this event (between 0 low to 5 high)

| HAZARDS       | 1        | 2   | 3      | 4    | 5         |
|---------------|----------|-----|--------|------|-----------|
| B. Likelihood | Very low | Low | Medium | High | Very high |

In Column C, enter the severity of Impact you expect. This will be based on your understanding of the various vulnerabilities, and the measures your community has already taken to reduce these.

| VULNERABILITIES    | 1     | 2            | 3        | 4           | 5        |
|--------------------|-------|--------------|----------|-------------|----------|
| C. Impact severity | Minor | Controllable | Critical | Devastating | Terminal |

In Column D, multiply your likelihood by impact ratings: Column B x C. This will give you your risk score.

| RISK SCORE  | 1-3      | 8-4 | 14-9   | 19-15 | 25-20     |
|-------------|----------|-----|--------|-------|-----------|
| Description | Very low | Low | Medium | High  | Very high |

In Column E, convert your risk scores to simple priority scores: 3-low 2-medium 1-high.

| RISK SCORE     | 1-3 | 8-4 | 14-9   | 19-15 | 25-20 |
|----------------|-----|-----|--------|-------|-------|
| PRIORITY LEVEL | 3   | 3   | 2      | 1     | 1     |
| Description    | Low |     | Medium | High  |       |

## School Building Safety Checklist

Identify any structural safety concerns that may require further investigation. You may need the support of a qualified engineer or architect to undertake this assessment with you. If any of these conditions apply to your buildings, you will need to investigate further with professional engineering help.

The structural safety of buildings may be at risk as a result of any of these conditions:

### 1. LOCATION and SOIL

- Marshy soil
- On top or next to fault line
- On a steep slope
- Below or on a landslide-prone slope
- In a flood plain or stream bed
- Soil not compacted prior to construction

### 2. AGE OF BUILDING and BUILDING CODES

- Constructed prior to implementation and enforcement of building codes
- Constructed without regard for compliance with building codes
- Building codes do not address the hazards you face

### 3. LOAD CARRYING SYSTEM

- Reinforced concrete building with discontinuous, uneven, or poorly connected moment frame
- Masonry, stone, and adobe without an earthquake tie beam
- Adobe with no horizontal or vertical reinforcement
- Masonry without regular cross-walls and small window and door openings

### 4. BUILDING HEIGHT

- 4 + storey poorly constructed reinforced concrete
- 2 + storey unreinforced masonry

### 5. DESIGN

- Different stories have same height, but have openings of different sizes and locations
- Different stories have different heights.
- Very long and narrow rectangular building

- “L”-shaped, “H”-shaped, “T”-shaped, or cross-shaped building without isolation joints
- Flood water cannot flow easily through or around the building

## 6. CONSTRUCTION DETAILING

Reinforced concrete construction:

- Insufficient or non-overlapping vertical steel in columns and beams
- Transverse steel not closed 135 degrees
- Uncleaned sand and aggregate mixed with concrete
- Concrete not vibrated to remove air bubbles
- Roof not securely fastened to structure

## 7. WATER DAMAGE

- Rainwater leaks from roof inside the building
- Interior dampness or odor



# Family Disaster Plan

Check as completed.

| <b>ASSESSMENT AND PLANNING</b> |   |
|--------------------------------|---|
| <input type="checkbox"/>       | We hold a family disaster planning meeting every 6 months (household, extended family, or family of one). We identify our risks and use this checklist for our planning.  |
| <input type="checkbox"/>       | We identified exits and alternative exits from our house and building.  |
| <input type="checkbox"/>       | We searched for and identified hazards in our home (e.g., furniture or equipment that can fall or slide during earthquake or flood) and our environment (e.g., hazardous materials sites).  |
| <input type="checkbox"/>       | We know our out-of-area contact person(s) and phone number(s): (ideally cell phone for text messaging) It's: _____  |
| <input type="checkbox"/>       | We know that we will only use the telephone in case of physical emergency after a disaster. We will use radio and television for information.   |
| <input type="checkbox"/>       | We know where we would reunite<br>Inside the house: _____<br>Outside the house: _____<br>Outside the neighborhood: _____<br>and we have a private message drop location outside our house.  |
| <input type="checkbox"/>       | We made our copies of important documents, and key addresses and phone numbers. We have one set with our out-of-area contact and/or we keep one in our evacuation go-bag.   |
| <input type="checkbox"/>       | We are spreading the word to everyone we know.  |
| <input type="checkbox"/>       | We participate in emergency planning with our community.  |
| <input type="checkbox"/>       | We make our expectations known to local, regional and national policy-makers.   |
| <b>PHYSICAL PROTECTION</b>     |   |
| <input type="checkbox"/>       | For earthquake: We have fastened tall and heavy furniture, appliances, large electronics, lighting fixtures and other items that could kill us or our children, to wall stud or stable surface. For storm: We have shutters or similar window protection. |
| <input type="checkbox"/>       | We know never to light a match, lighter, or any other flame after an earthquake until we are sure there is no danger of escaping gas anywhere around.   |
| <input type="checkbox"/>       | Our building has been designed and built according to seismic, wind or flood codes, or it has been inspected by a qualified engineer, and required repair or retrofit has been completed.   |
| <input type="checkbox"/>       | We maintain our building, protecting it from damp, and repairing damage when it occurs.   |
| <input type="checkbox"/>       | For earthquake: We have put latches on kitchen cabinets, secured televisions, computers and other electronic items, and hung pictures securely on closed hooks to protect ourselves from things that could injure us, or would be expensive to replace.   |

|   |   |
|---|---|
| <input type="checkbox"/>                      | We have a fire extinguisher and maintain it once a year.  |
| <input type="checkbox"/>                      | We have secured family heirlooms and items of cultural value that could be lost to future generations.  |
| <input type="checkbox"/>                      | We have limited, isolated, and secured any hazardous materials to prevent spill or release.   |
| <input type="checkbox"/>                      | We keep shoes and flashlights with fresh batteries, by our beds. For flood: We keep flotation device or life-jacket on the highest floor in the building. For fire: We have cleared away fire hazards from around our home. For water and debris flow: we have created channels and are prepared to make sandbags.  |
| <input type="checkbox"/>                      | We have protected ourselves from glass breaking with heavy curtains, window film or shutters.   |
| <input type="checkbox"/>                      | We consciously reduce, reuse and recycle.   |
| <b>RESPONSE CAPACITY: SKILLS AND SUPPLIES</b> |   |
| <input type="checkbox"/>                      | We know how to use a fire extinguisher.   |
| <input type="checkbox"/>                      | We know how to turn off our electricity, water and gas.   |
| <input type="checkbox"/>                      | For advanced warning: We understand early warning systems and know how to respond. For earthquake: We have practiced «drop, cover and hold» and identified safest places next to strong low furniture, under strong table, away from windows. If our home is adobe with a heavy roof, we have practiced running out to a clear space.   |
| <input type="checkbox"/>                      | We have gathered survival supplies in our home and made up evacuation bags for our home and car. (including 1 gallon of water per person per day and food for 3 days, prescription medications, water, high energy food, flashlight, battery, first aid kit, cash, change of clothing, toiletries and special provisions we need for ourselves, including elderly, disabled, small children, and animals.). |
| <input type="checkbox"/>                      | We know principles of incident command systems or similar standard emergency management system for organizing post-disaster self-help in our community.   |
| <input type="checkbox"/>                      | We have learned first aid, light search and rescue, fire suppression, wireless communication, swimming, or community disaster volunteer skills.   |

## Drill Scenarios

### *Earthquake drill scenario*

(Adapt and practice if you are in a high seismic risk area). The drill will be based on a **hypothetical** scenario for a likely 6.8 magnitude earthquake will roll through [your region] and affect all areas of our province. Intense shaking will begin at \_\_\_\_\_ [time] and will last for 45 seconds. There will be at least one strong aftershock within 15 minutes. Electrical power, water, gas and sewer systems have failed in many areas. The school's telephones do not work. Some highways near by are damaged and traffic is not moving. Local surface streets are also blocked. Numerous fires have started due to fallen electrical lines and explosions caused by damaged underground gas lines. We assume that there will be a state of emergency and all staff except those with prior permission are expected to remain at school. Police and Fire Departments are overwhelmed and cannot be reached. School staff must assume that they will be on their own to shelter and care for students and staff. [Note: If your school is near the coast, be sure to evacuate to higher ground, in case of tsunami]

### *Flood drill scenario*

(Adapt and practice if you are in a flood plain). The drill will be based on a hypothetical scenario for a flood that occurs during the 5<sup>th</sup> day of rain, generates massive flood runoff when the river spills over its banks or floodgates are thrown open to prevent a dam burst. This is unlike anything experienced in the past 100 years. The principal has received a telephone call warning of the immanent flooding. If your building has 2 floors, your plan is to evacuate to the second floor. If your building has 1 floor, your plan is to evacuate to higher ground if time permits. Students have flotation jackets or belts for safety.

### *Hazardous materials exercise*

(Adapt and practice if you are located nearby production facilities that use hazardous materials). The drill will be based on a hypothetical scenario for an industrial hazardous materials release from a nearby factory. You have met with nearby industrial facilities operators and have learned the measures to take. You receive a siren. Telephone communication systems are working.

### **Other variations**

To make this a realistic simulation drill, you can add your own “injects.” At the beginning and at any time during the drill you can make “new information” known, which provides challenges that participants must handle, just as they would in a real life situation.

**REMEMBER:** every drill should be taken seriously. Every fire alarm should be responded to, as though it were real, as we do not know when it is a drill, and when it is real.

## Drill Preparedness Checklists

### Teacher checklist

#### Teachers: Prepare yourselves

- ❑ School emergency evacuation route map is posted in your room. On it mark your room clearly in a contrasting color. If you do not have one, please obtain it from the school office.
- ❑ Emergency Go-Bag or Go-Bucket checklist, emergency notebook/clipboard checklists, and student comfort kits checklist are complete.
- ❑ All of these supplies are in place and are easily transportable for evacuation or field trips.
- ❑ Confirm whether you will have any special duties. Get to know your buddies in neighboring classes. If your name does not appear on our emergency organization matrix or if you do not have a class, please be prepared to report to the incident command center.
- ❑ Check that you know the location of your fire extinguisher and recall the acronym to remind you how to use it: P.A.S.S. Pull the pin, aim at the base of the fire, squeeze the nozzle and sweep at the base of the fire.
- ❑ It is highly recommended that you complete your own family disaster plan at home and your plan with your own childcare providers. Please prepare yourself at home and at work in the event you are needed to stay longer than your scheduled day. The principal or designee will release staff members as the needs change. If you have very extenuating circumstances discuss these with your principal NOW, not during an emergency.
- ❑ Plan a quiet activity that students can do in the assembly area in the event of a real emergency or a drill.
- ❑ In case of disaster before or soon after the end of the school day, please be prepared to return to school to provide assistance to students.

#### Teachers: Prepare your students

- ❑ Encourage your students to take all drills very seriously.
- ❑ Practice building evacuation with your classroom and with neighboring classroom. Make sure that your students know the 4 rules for building evacuation: Don't Talk! Don't Push! Don't run! Don't turn back! Students should know that



if there is an earthquake when they are outside of a classroom (during break or lunch or if they are somewhere), they should exit with the nearest class and should NOT go back inside. If they are between classes, they should assemble in the outdoor emergency assembly area with their next period class.

- ❑ Review the emergency evacuation routes. Prepare 4 monitors who will work as buddies and lead the way, carefully checking to make sure that the route is clear. (This is of most importance for classes on second floor or without easy access to open space outdoors).
- ❑ If you face earthquake risks, practice “Drop, Cover, and Hold On” drill, having students hold their position for 45 seconds. You may count together: one-one hundred, two one-hundred etc.
- ❑ Teacher in science labs should demonstrate to students how to extinguish any flames and isolate any hazardous materials in use.
- ❑ Make sure that students understand disaster and emergency student release procedures. Inform students that only their parent(s), guardian(s), or other adult(s) listed on their emergency contacts card will be allowed to pick them up from school in a real emergency. Explain the “request gate”/“reunion gate” idea and reasons.

### **Teachers and Students: Prepare your parents**

- ❑ Teachers are to pass out drill announcements parent letters to their students to take home.
- ❑ Confirm with parents that their Emergency Contact Form is up-to-date, and explain the importance of the reunification procedures.
- ❑ Reassure parents that their children will be safe at school until they arrive.

### **Transportation staff checklist**

#### **Transportation staff: prepare yourself *before* an emergency.**

- ❑ In the event of a major emergency, bus drivers’ first responsibility is the safety and welfare of the students. The driver will account for all students and staff throughout the emergency.
- ❑ First aid training is up-to-date.
- ❑ Emergency contact information for all students on my route is with me in my vehicle.
- ❑ Emergency medical information for students with disabilities or life-threatening illnesses is with me, in my vehicle.

**Transportation Staff: prepare your passengers.**

- In areas with earthquake risk, we have practiced “Drop, Cover and Hold” and vehicle evacuation with your students.
- All passengers know that they must act in accordance with driver’s instructions.

**Transportation Staff: prepare your parents and caregivers.**

- Parents have been reminded that in case of emergency during the commute, I will take children to the nearest school.

**Transportation Staff: during earthquake shaking, I know that I will:**

- Stop the bus away from power lines, bridges, overpasses, buildings, possible landslide conditions, overhanging trees, or other dangerous situations. (Beware that shaking may be mistaken for a tire blow-out)
- Instruct students to “Drop, Cover and Hold On”, and take command.
- Set brake, turn off ignition, and wait for the shaking to stop.

**Transportation Staff: following earthquake, and in case of other hazards, I know that I will:**

- Check for and attend to injuries. Report and record injuries.
- Evacuate the bus in the event of a fire.
- Not attempt to cross any damaged bridges or overpasses or drive through any flooded streets or roads.
- Use radio to notify Transportation Dispatch of your location and receive instructions if possible.
- If it is safe to continue, proceed by vehicle or on foot to the nearest school.
- Notify school site incident commander and provide them with students’ emergency contact and emergency medical information.
- Remain with the children until further instructions are provided from the incident commander or Transportation Dispatch.

**Transportation Staff: protecting students in case of disaster or emergency**

- I understand that I may release students only to:
  - Parents or guardians or those listed on Emergency Contact List, who properly identify themselves (retain copy of Student/Family Reunification Form).
  - Medical care facility providers (document status and destination).
  - School principal, site manager, teacher, or transportation official.
  - Public safety authorities.
- I understand that I may need to improvise and make independent decisions, depending on the emergencies, age of children, location of bus and so forth.

## Class Status Report Form

*Return this form to the assembly area collecting point, immediately after evacuation.*

Responsible teacher/staff name: \_\_\_\_\_ room \_\_\_\_\_  
Alternate responsible person: \_\_\_\_\_ Yes \_\_\_ No \_\_\_

All Persons Accounted for:  Yes  No

| Missing or Unaccounted for: | Last seen: |
|-----------------------------|------------|
| _____                       | _____      |
| _____                       | _____      |
| _____                       | _____      |
| _____                       | _____      |
| _____                       | _____      |

| Injured persons: | Where now: |
|------------------|------------|
| _____            | _____      |
| _____            | _____      |
| _____            | _____      |

| Absent / Left early / Sent elsewhere? | Where? |
|---------------------------------------|--------|
| _____                                 | _____  |
| _____                                 | _____  |

| Additional persons present – not normally | Normally where? |
|---|-----------------|
| _____                                     | _____           |
| _____                                     | _____           |

## Student-Family Reunification Form

### PART 1: KEEP THIS TOP PORTION AT REQUEST GATE

#### PARENTS FILL IN THIS PART

Student's Name Grade

Sibling's Name Grade

⌂<

### PART 2: SEND THIS MIDDLE PORTION FROM REQUEST GATE TO ASSEMBLY AREA WITH RUNNER. SEND IT TO RELEASE GATE WITH STUDENT. *Date*

#### STEP 1A – REQUEST GATE – PARENTS FILL IN THIS PART

Student's Name Grade

Sibling's Name Grade

Teacher(s)

Parent/Guardian Name (Please Print)

#### STEP 1B – REQUEST GATE – VERIFICATION – STAFF FILL IN THIS PART

Name on Emergency Card:     YES     NO            Proof of I.D.:     YES     NO

Authorized by (Principal or designee) Time

#### STEP 2 – ASSEMBLY AREA – STAFF FILL IN THIS PART

Teacher's Signature:

Note:

⌂<

### PART 3: SEND THIS BOTTOM PORTION TO REUNION GATE WITH PARENT REUNION GATE: MATCH PARTS 2 and 3 OF THIS FORM, STAPLE AND FILE

#### STEP 3A – RELEASE GATE – PARENTS FILL IN THIS PART

Student's Name Grade

Sibling's Name Grade

Teacher(s)

Parent/Guardian Name (Please Print)

Parent/Guardian Signature

Destination: Phone Number

#### STEP 3B – RELEASE GATE – STAFF FILL IN THIS PART

Proof of I.D. YES NO

Authorized by (Principal or designee) Time released

## Emergency Provisions Checklists

### ADMINISTRATION OFFICE "GO-BOX"

| Description                                 | Ready | Missing | Initials / Date |
|---|-------|---------|-----------------|
| Student Emergency Contact Cards             |       |         |                 |
| Staff and Student Class Roster and Schedule |       |         |                 |
| Student check-in/out log                    |       |         |                 |
| Daily visitors log                          |       |         |                 |
| Important phone numbers                     |       |         |                 |
| School site map / floor plan                |       |         |                 |
| Keys  |       |         |                 |
| Pens  |       |         |                 |
| Notepads                                    |       |         |                 |
| Marking pens                                |       |         |                 |
| Stapler and staples                         |       |         |                 |
| Paper clips                                 |       |         |                 |
| Masking tape                                |       |         |                 |

### NURSING OFFICE "GO-BOX"

| Description                                | Ready | Missing | Initials / Date |
|--|-------|---------|-----------------|
| Existing patient medications log           |       |         |                 |
| Student prescription and other medications |       |         |                 |
| First aid supplies                         |       |         |                 |
| Blanket                                    |       |         |                 |
| Sheet                                      |       |         |                 |

**SCHOOL EMERGENCY SUPPLIES BIN**

| Description                            | Ready | Missing | Initials / Date |
|--|-------|---------|-----------------|
| Water                                  |       |         |                 |
| Student supplied blankets              |       |         |                 |
| Megaphone                              |       |         |                 |
| Sticks for class group signs           |       |         |                 |
| Emergency Radio                        |       |         |                 |
| Staff/team vests or necklaces for ID   |       |         |                 |
| Generators                             |       |         |                 |
| Shelter supplies                       |       |         |                 |
| Blankets                               |       |         |                 |
| Privacy screen (eg cardboard box)      |       |         |                 |
| Walkie Talkies                         |       |         |                 |
| Sanitation supplies                    |       |         |                 |
| Hard Hats (for search and rescue team) |       |         |                 |
| Crowbar                                |       |         |                 |
| Shovel                                 |       |         |                 |
| Ladder                                 |       |         |                 |
| Duct tape                              |       |         |                 |
| Reunification Forms                    |       |         |                 |
| File box                               |       |         |                 |

**DISASTER RESPONSE TEAM NOTEBOOKS**

| Description  | Ready | Missing | Initials / Date |
|--|-------|---------|-----------------|
| SCHOOL MAP (showing evacuation routes)   |       |         |                 |
| ASSEMBLY AREA MAP (showing class locations)  |       |         |                 |
| MASTER LIST OF STUDENTS (school office box will contain list of changes since notebook was made) |       |         |                 |
| FACULTY/STAFF ROSTER   |       |         |                 |
| SCHOOL DISASTER AND EMERGENCY RESPONSE MATRIX  |       |         |                 |
| INCIDENT COMMAND SYSTEM CHECKLISTS   |       |         |                 |
| BASIC EMERGENCY AND SPECIFIC HAZARD PROCEDURES   |       |         |                 |

**CLASSROOM "GO-BAG" OR BUCKET** for each class.

| Description     | Ready | Missing | Initials / Date |
|-----------------|-------|---------|-----------------|
| 1 FIRST AID KIT |       |         |                 |
| 1 FLASHLIGHT    |       |         |                 |

|                                      |  |  |  |
|--------------------------------------|--|--|--|
| 1 RADIO                              |  |  |  |
| BATTERIES                            |  |  |  |
| 1 WHISTLE                            |  |  |  |
| 4 EMERGENCY BLANKET                  |  |  |  |
| 4 PLASTIC RAIN COVER                 |  |  |  |
| TISSUES                              |  |  |  |
| 1 CLEAN WHITE SHEET                  |  |  |  |
| 3 MARKING PENS                       |  |  |  |
| PLASTIC BAGS                         |  |  |  |
| PENS                                 |  |  |  |
| NOTEPAD                              |  |  |  |
| STUDENT ACTIVITY SUPPLIES (optional) |  |  |  |

**CLASSROOM EMERGENCY CLIPBOARD or NOTEBOOK**

| Description                          | Ready | Missing | Initials / Date |
|--------------------------------------|-------|---------|-----------------|
| CURRENT CLASS ROSTER                 |       |         |                 |
| 1 RED "CASUALTIES or DANGER" SIGNS   |       |         |                 |
| 1 GREEN "COMPLETELY EVACUATED" SIGNS |       |         |                 |
| YOUR ROOM # SIGN                     |       |         |                 |
| INJURED/MISSING STATUS REPORT FORM   |       |         |                 |

**STUDENT COMFORT BAGS**

| Description  | Ready | Missing | Initials / Date |
|--|-------|---------|-----------------|
| ½ liter bottle of drinking water                         |       |         |                 |
| 1 high energy / long life snack                          |       |         |                 |
| Change of underwear or clothing                          |       |         |                 |
| Family photo and/or comfort note from parents to student |       |         |                 |

## Contact Information

### Health and Education Department

2121 Pennsylvania Avenue, NW

Washington, DC 20433 USA

[ifc.org](http://ifc.org)