After-Action Reports: Capturing Lessons Learned and Identifying Areas for Improvement

Emergency management planning comprises four phases, and it is important to factor in all of them when developing comprehensive, all-hazard emergency management plans for schools and school districts. Each of the phases—prevention-mitigation, preparedness, response and recovery—is intricately linked to the others, and together they form the foundation for efficient emergency response and continuity of operations.

Among the many key components of emergency management planning are: establishing and institutionalizing an Incident Command System (ICS); providing continual training to staff members and volunteers; collaborating with community partners to develop policies and protocols; and conducting routine exercises and drills. Exercises are invaluable tools for testing and reinforcing emergency management plans, identifying gaps in policies and procedures, and preparing staff for rapid, coordinated and effective responses and recovery in an emergency or a crisis. Equally as important as exercises are corresponding after-action reports.

After-Action Reports

After-action reports have a threefold purpose. They provide an opportunity for everyone involved in an exercise to: 1) identify areas in the current emergency management plan that are in need of improvement; 2) make recommendations to improve it; and 3) capture key lessons learned.

The key components of after-action reports are:

- Overview;
- Goals and objectives;
- Analysis of the outcomes;
- Analysis of the capacity to perform critical tasks;
- Summary; and
- Recommendations (including specific improvements for each community partner).

In summer 2006, the Emergency Response and Crisis Management (ERCM) Technical Assistance (TA) Center solicited and received a total of 14 after-action reports from recipients of the U.S. Department of Education’s ERCM Grant Program. The ERCM TA Center compiled the lessons learned by the school districts after each district had conducted exercises. All 14 after-action reports identified the following five components that should be included in emergency management plans:

1. Coordinate and test emergency response capacity in collaboration with community partners by activating the ICS;

2. Assess response time and quality of response;

The contents of this document are not prescriptive best practices for every school or school district, but rather suggestions to consider in a school or district’s emergency management efforts.
3. Examine the effectiveness of communications plans with community partners, school staff, students, parents and guardians and the public;

4. Identify training needed by first responders, crisis response team members, school staff and students; and

5. Incorporate lessons learned from after-action reports into emergency management plans.

The lessons learned by the school districts primarily focused on activities that take place during the prevention-mitigation and preparedness phases of emergency management planning. The following in-depth analyses of each of the areas identified by school districts as a lesson learned will assist other schools and school districts in strengthening their emergency management plans and improving the effectiveness of their responses during a crisis.

**Lesson 1: Coordinate and test emergency response capacity in collaboration with community partners by activating the ICS.**

Before an emergency management plan can be developed and implemented, school and school district crisis response teams should be established. These teams consist of various professionals with expertise in emergency management (e.g., police, fire and emergency medical services personnel) and include community partners (e.g., public and mental health professionals) and school-based staff (e.g., facilities and cafeteria managers, nurses, transportation managers, disability specialists, counselors, teachers and administrators). Districts should develop partner agreements or mutual-aid agreements with community partners to document the roles and responsibilities of each. These documents should also address coordination efforts with state and local emergency management agencies, as well as how information will be shared between all partners, agencies and local first responders.

The identification of roles and responsibilities in advance is critical. This is accomplished by establishing the ICS, a standard crisis response structure that facilitates effective and efficient incident management. The ICS integrates a combination of facilities, equipment and standards into one management structure with five functional areas—Command, Operations, Planning, Logistics, and Finance-Administration—for managing all major incidents. The following must be included when establishing an ICS and coordinating with community partners:

- Define and review the duties of each ICS team member, including first responders and community partners;
- Build redundancy into the ICS structure to allow for absent or missing team members;
- Engage first responders and other partners in developing emergency management plans;
- Include partners from every emergency management agency in planning, implementing and evaluating exercises;
- Ensure that all first responders know the procedures outlined in school and school district emergency management plans, as well as the layouts of all school buildings and campuses;
- Communicate the location of staging areas (e.g., ICS, first aid, public information center, media relations and parent-student reunification) to all school administrators and community partners;
- Ensure that staging areas have sufficient communications capabilities, including interoperable and portable two-way radios for school staff to communicate with the ICS commander;
- Have key members of the ICS wear vests to identify their agency affiliation and role; and
- Develop an incident action plan (i.e., an oral or written plan containing objectives reflecting the overall incident strategy and specific actions to take) as part of the ICS response at the staging area during an emergency.

**Lesson 2: Assess response time and quality of response.**

Documenting what occurs during exercises and actual emergencies helps to improve response times and the quality of the responses. An improved response time is a quantifiable decrease in the amount of time it takes to respond to a crisis when compared to the initial response time for a similar crisis. Improvements in quality of response are measured through an after-action report that describes the exercise, cites successes and outlines recommendations for addressing shortcomings and implementing modifications. To improve response time and quality of response, schools and school districts must:

- Ensure that first responders and school staff members have the necessary supplies and equipment for responding to multiple hazards;
- Provide evacuees with more detailed directions;
- Obtain a detailed description of any suspects, including physical features, the number of suspects, and when and where they were last seen; and
- Determine the procedures and equipment needed in the event of a power failure.

**Lesson 3: Examine the effectiveness of communications plans with community partners, school staff, students, parents and guardians and the public.**

The timely acquisition and analysis of information before, during and after an exercise or incident is a critical component of emergency management. During an incident, effective communication among crisis response team members, community partners, school and school district personnel, students, parents and guardians and the media is crucial. Open lines of communication should
be established well in advance by developing solid communications plans and establishing protocols. School districts should also develop procedures with community partners to coordinate the accurate and timely release of information to the public and designate a Public Information Officer (PIO) to handle the work. To improve the effectiveness of communications plans and the dissemination of information, schools and school districts should:

- Evaluate and upgrade communications equipment to ensure that they are properly working (e.g., landlines, cellular telephones, faxes, computers, two-way radios, etc.);
- Ensure that there is an adequate supply of fresh batteries and that all battery-powered equipment such as laptop computers and cellular telephones is fully charged in case of a power outage.
- Provide equipment that is interoperable with that of local first responders and school building personnel;
- Use pagers, alert systems or other technology to enable instant communication between the superintendent and all the schools in his or her district;
- Look for “dead spots” (i.e., areas where a signal cannot be received by communications equipment such as cellular telephones) in school buildings and make them known to school staff, first responders and the crisis response team;
- Predesignate periodic and consistent check-ins for community partners to consult with the ICS during an emergency event or exercise;
- Designate someone other than the school principal or incident commander to communicate with 911 operators;
- Designate one or two alternates to also communicate with 911 operators and provide training for those individuals;
- Create documentation forms to track information—including calls received, calls made and rumors—during an exercise or emergency;
- Designate a PIO to be responsible for the dissemination of information to the public;
- Determine a staging area for the media and first responders, and include the area in emergency management plans;
- Keep students and staff informed during a drill or emergency; and
- Increase public awareness about evacuation plans before, during and after a communitywide drill.

**Lesson 4: Identify training needed by first responders, crisis response team members, school staff and students.**

All school staff members must be trained in crisis response procedures. Training, combined with emergency exercises, is an invaluable tool for preparing staff, testing emergency management capabilities and reinforcing key concepts in school and schools districts’ emergency management plans.
preparing staff, testing emergency management capabilities and reinforcing key concepts in school and schools districts’ emergency management plans. All training sessions should be conducted annually with community partners to capitalize on responders’ expertise and ensure consistent learning. Additional training should be provided to school personnel and crisis response team leaders based on their roles in the ICS. The following training guidelines should be implemented in emergency management plans:

- Train all district- and school-based staff and first responders in the use of the National Incident Management System (NIMS) and the ICS, and include them in planning and coordinating exercises;
- Continue to collaborate with fire and law enforcement personnel to ensure that the agencies and the schools they service know what to expect during an exercise or emergency; and
- Train school receptionists and other front desk staff on how to respond to threats and alert first responders.

**Lesson 5: Incorporate lessons learned from after-action reports into emergency management plans.**

An important part of the preparedness and response phases of emergency management planning is the review of exercises through after-action reports and other evaluations. These activities are highly effective in identifying strengths and areas in need of improvement so that school and school district emergency management plans can be regularly updated. Examples of lessons learned that could be incorporated into emergency management plans include the following actions:

- Clarify procedures for creating and implementing a school’s ICS;
- Develop procedures for procuring supplemental equipment, professional support and other resources (e.g., food, water and technology) for use during and after an emergency;
- Provide *go-kits* (i.e., a self-contained, portable stockpile of supplies) for classrooms, administrators, facilities personnel and school nurses;
- Develop detailed school bus evacuation plans that outline the bus staging area, the routes building evacuees will take to get to the buses, bus drivers’ responsibilities, evacuation route hazards, and the procedures for placing students and staff with preexisting medical conditions or disabilities first on the buses;
- Assign someone to assist the district or school nurse with the first aid equipment and go-kits taken on evacuation routes;
Supply medical personnel with equipment at the evacuation site in case the nurse has to remain on-site (i.e., in the building or on the campus);

Create a family reunification plan and communicate that plan to students, parents, guardians and the media;

Designate primary and alternate parent-student reunification sites;

Develop plans for the supervision and accountability of students at evacuation and reunification sites;

Plan activities for students at the parent-student reunification site (e.g., provide books and games); and

Send the after-action report, documenting needs to be addressed, to the superintendent and other responsible partners (e.g., food services and facilities managers) in the school district so that the lessons learned can be incorporated into future emergency responses and an updated version of the emergency management plans.

Conclusion

After-action reports are an integral part of the emergency preparedness planning continuum and support effective crisis response. The debriefings that precede the reports help schools and school districts analyze how school personnel and first responders function during an exercise or actual emergency. The lessons learned can be used to proactively develop and enhance emergency management plans and procedures that will ensure the safety of the entire school community.