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

READINESS AND EMERGENCY MANAGEMENT FOR SCHOOLS TECHNICAL ASSISTANCE CENTER

After an emergency event has occurred on your campus and your education agency has activated your emergency operations plan (EOP), it is likely that you and your colleagues have feedback and lessons learned. Similarly, after conducting an emergency exercise — whether it be an orientation, tabletop exercise, drill, functional exercise, or full-scale exercise – the planning team, the response team, community partners (if they participated), and/or other members of the whole school/campus community are likely to have reflections on the successes and/or challenges of the exercise. This information is critical to strengthening, maintaining, and refining your EOP. But how are the feedback and reflections captured, so that the EOP can be improved? The planning team can debrief together after the emergency event or exercise and create an after-action report that evaluates results, identifies gaps or shortfalls, and documents lessons learned.

As described in the six-step planning process in the _Guide for Developing High-Quality School Emergency Operations Plans_ (_School Guide_), the _Guide for Developing High-Quality Emergency Operations Plans for Institutions of Higher Education_ (_IHE Guide_), and _The Role of Districts in Developing High-Quality School Emergency Operations Plans_ (_District Guide_), Step 6 involves the implementation and maintenance of the EOP. Not only is this step where planning teams exercise the plan but it is also where the plan evolves as planning teams obtain new information and insights. After-action reports support schools, school districts, and institutions of higher education (IHEs) in effectively executing an exercise as well as reviewing, revising, and maintaining the plan. Therefore, after-action reports should ideally be created after the EOP is activated, either because of an emergency exercise or an actual incident. The report will help teams close the loop in the planning process and enhance their overall preparedness for an emergency.

An Overview of After-Action Reports

After-action reports capture the incident or scenario and actions of the whole school/campus community and community partners. The purpose is to synthesize information and data from the emergency event or exercise, recognize strengths, determine areas of improvement, and generate potential corrective actions. Much of the information can be sourced from a debrief session after the emergency event or exercise. Ideally, the debrief session is led by a facilitator and attended by response team members, planning team members,

safety leadership, and community partners. After-action reports present an opportunity to refine your EOP, policies, procedures, and training; engage in whole community planning; and collaborate and coordinate with community partners.

The key components of after-action reports are

- **Overview**: date, time frame/duration, and location of the event; name and type of exercise (if applicable); participants and agencies/organizations in attendance; scenario; and EOP annex(es) activated and/or tested;
- **Goals and objectives**: broad, general statements that indicate the desired outcome of the emergency exercise or event; and specific, measurable actions for achieving the goals;
- **Analysis of the outcomes**: the level to which goals and objectives were or were not met and why, based on observations, surveys, and discussions;
- **Analysis of critical tasks/capacity**: strengths and areas of improvement in regard to the capability levels of administrators, faculty, staff, and community partners as well as the adequacy of supplies and equipment;
- **Summary**: lessons learned, including demonstrated capabilities, primary areas for improvement, and/or required updates to the EOP; and
- **Recommendations**: corrective actions to be implemented, person(s) responsible, needed resources, and expected completion date.

This fact sheet was created to assist schools, school districts, and IHEs in creating after-action reports to strengthen their emergency management planning efforts and the effectiveness of their EOPs. To strengthen your EOP and incident response capabilities, your education agency should

- Coordinate and test emergency response capacity in collaboration with community partners by activating the Incident Command System (ICS);
- Evaluate response time and quality of response;
- Examine the effectiveness of the Communications and Warning/Notification Annex;
- Identify training needed by members of the whole school/campus community; and
- Incorporate lessons learned from after-action reports into EOPs.

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

Before an EOP can be developed and implemented, core planning teams should be established. These teams consist of community partners (e.g., fire, emergency medical services, law enforcement, emergency management, public health, and mental/behavioral health) and school/campus-based staff

After-Action Report Resources From the REMS TA Center Tool Box

The REMS TA Center Tool Box is a virtual library of tools developed by school and higher ed emergency managers in the field. The Tool Box contains sample after-action reports, after-action report templates, and other resources for conducting and planning exercises and drills.

https://rems.ed.gov/ToolBox.aspx

(e.g., facilities and cafeteria managers, transportation managers, disability specialists, athletics staff, counselors, school psychologists, school social workers, school nurses, campus public health and mental/behavioral health practitioners, campus public safety officials, school resource officers and campus police, faculty, and administrators). As the EOP is being developed, planning teams can create partner agreements and memoranda of understanding with community partners to solidify the roles and responsibilities of each party involved. The development of partner agreements and mutual aid agreements presents an opportunity to strengthen coordination efforts with state and local emergency management agencies, articulate roles and responsibilities, and ensure that courses of action outlined in the EOP consider all key stakeholders before, during, and after an incident.

Another effective way to ensure advance identification of the roles and responsibilities of each party involved in incident response is by establishing an ICS. The ICS is a fundamental concept presented in the National Incident Management System (NIMS) and provides standardization through consistent terminology and established organizational structures. This system 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. When establishing an ICS and coordinating with community partners, consider

- Defining and reviewing the duties of each ICS team member;
- Building redundancy into the ICS structure to allow for absent or missing team members;
- Inviting community partners to become members of the core planning team, and engaging them throughout the six-step planning process when developing your EOP;
- Including partners from every emergency management agency in planning, implementing, and evaluating exercises and in every activation of the EOP;
- Communicating the location of staging areas (e.g., ICS, first aid, public information center, media relations, and parent-student reunification) to all administrators and community partners;

- Ensuring that staging areas have sufficient communications capabilities, including interoperable and portable two-way radios for staff to communicate with the Incident Commander;
- Outfitting key members of the ICS in easily identifiable vests to identify their agency affiliation and role; and
- Developing an incident action plan (i.e., an oral or written plan that contains objectives outlining the overall incident strategy as well as specific actions to take) as part of the ICS response at the staging area during an emergency.

Evaluate response time and quality of response

Documenting what occurs during exercises and in every activation of the EOP 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 an incident when compared to the initial response time for a similar incident. An ideal opportunity to review exercises and activations; review, revise, and maintain the EOP; and document changes in response time is provided by the after-action report. To improve response time and quality of response, consider

- Ensuring that the response team has the necessary supplies and equipment for responding to multiple threats or hazards;
- Developing a detailed Evacuation Annex that contains plans for how to evacuate individuals with limited mobility and that accounts for procedural changes based on the type of threat or hazard or if routes are unstable;

- Providing clear-cut instructions in multiple languages that ensure effective communication with all individuals, including those with disabilities and with access and functional needs;

- Obtaining a detailed description of any suspects, including physical features, the number of suspects, and when and where they were last seen; and

- Determining the procedures and equipment needed in the event of a variety of different threats or hazards.

Examine the effectiveness of the Communications and Warning/Notification Annex

The timely acquisition and analysis of information before, during, and after an exercise or incident is a critical component of preparedness. As a part of their EOPs, education agencies can develop a Communications and Warning/Notification Annex that outlines goals, objectives, and courses of action for internal communication and communication with external stakeholders before, during, and after an emergency. This annex includes how to disseminate necessary information with the whole school or campus community, how the communication system integrates with community partner communication networks, and how to handle the media. To improve the effectiveness of the Communications and Warning/Notification Annex, education agencies should consider

- Evaluating and upgrading communications equipment to ensure that it is functional (e.g., landlines, mobile devices, faxes, computers, two-way radios, etc.);

- Ensuring that the supply of fresh batteries is adequate and that all battery-powered equipment, such as laptop computers and mobile devices, is fully charged in case of a power outage;

- Providing equipment that is interoperable with that of community partners and school/campus personnel;

- Ensuring that relevant staff members are comfortable operating communications equipment;

- Using alert systems or other technology to enable instant communication between the administrators/leadership and all schools, buildings, and/or campuses;

- Identifying "dead spots" (i.e., areas where a signal cannot be received by communications equipment such as mobile devices) in buildings, and documenting them in the EOP for staff, community partners, and the response team;

- Predesignating periodic and consistent check-ins for community partners to consult with the ICS during an emergency event or exercise;

- Integrating the communications system into the local communications networks;

- Designating and training alternates to the Incident Commander who can communicate with 911 operators;

- Creating documentation forms to track information — including calls received, calls made, and rumors — during an exercise or incident;

- Designating a Public Information Officer to be responsible for the dissemination of information to the public;

- Determining a staging area for the media and community partners, and including the area in the EOP;

> At a minimum, training sessions should be conducted annually with community partners to capitalize on their expertise and ensure consistent learning.

- Keeping students and staff informed during and after an exercise or incident; and
- Increasing public awareness about evacuation plans before, during, and after a community-wide exercise.

Identify training needed by members of the whole school/campus community

The whole school or campus community should be trained in courses of action in the EOP. Training, combined with emergency exercises, is an invaluable tool for preparing staff, testing the EOP, and reinforcing key concepts in preparedness. Training components include holding meetings; visiting evacuation sites; providing appropriate and relevant literature on the plan, policies, and procedures to involved parties; posting key information throughout the building; and training staff on the skills necessary to fulfill their roles. At a minimum, training sessions should be conducted annually with community partners to capitalize on their expertise and ensure consistent learning. Bringing community partners that have a role in the EOP to the school to talk about the plan can

also help train students, parents/guardians, and the entire community on EOP procedures and will increase comfortability working with these partners. Additional training should be provided to school/campus personnel and response team leaders based on their roles in the ICS. When implementing EOP training guidelines, consider

- Training all education agency staff in the use of the NIMS and the ICS, and inviting community partners to join the training;
- Continuing to collaborate with community partners to ensure that the agencies and the schools/campuses they service know what to expect during an emergency; and
- Training receptionists and other front desk staff on how to respond to a variety of threats, hazards, or functions as well as how to alert relevant personnel identified in the EOP based on the context.

Incorporate lessons learned from after-action reports into EOPs

An important part of Step 6 of the planning process is reviewing, revising, and maintaining the EOP. By exercising the plan, gathering feedback and data from the exercise, and creating after-action reports, your education agency can close the loop in the planning process. As planning teams develop after-action reports, they acquire lessons learned, obtain new information and insights, and can update priorities accordingly. Reviews should occur at least biennially;

however, many education agencies opt to review their plans annually. Additionally, your education agency need not review or revise the entire EOP at once. One strategy to ensure that the EOP is under continuous review and refinement is to revise portions of the plan throughout the year. For example, your education agency may consider reviewing a portion each month or at natural breaks in the academic calendar. Examples of lessons learned that could be incorporated into EOPs include

- Clarifying procedures for creating and implementing an ICS;
- Developing procedures for procuring supplemental equipment, professional support, and other resources (e.g., food, water, and technology) for use during and after an incident;
- Providing go-kits (i.e., a self-contained, portable stockpile of supplies) for classrooms, residence halls, and student centers as well as for administrators, facilities personnel, and school nurses;
- Developing detailed 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;
- Assigning staff to assist nurses with first aid equipment and go-kits for use on evacuation routes;
- Supplying medical personnel with equipment at evacuation sites in case the nurse has to remain on-site (i.e., in the building or on the campus);
- Creating a predetermined, practiced Family Reunification Annex, and communicating appropriate parts of the plan to students, parents, guardians and the media;
- Designating primary and alternate parent-student reunification sites;
- Developing plans for the supervision and accountability of students at evacuation and reunification sites;

- Planning activities for students at the parent-student reunification site (e.g., providing books and games); and
- Sending the after-action report, documenting needs and opportunities for improvement, to the leadership and other responsible partners (e.g., food services and facilities managers) in the education agency so that the lessons learned can be incorporated into future exercises and an updated version of the EOP.

Conclusion

After-action reports are an integral part of the emergency management planning continuum and support effective response. The debriefings that precede the reports help education agencies analyze how school/campus personnel and community partners function during an exercise or incident. The lessons learned can be used to proactively develop and enhance EOPs and procedures that will ensure the safety of the entire school/campus community before, during, and after an incident.

Additional Resources

Further Reading – REMS TA Center

- Implementing the National Incident Management System (NIMS): Practitioner Oriented-Strategies for Education Agencies, Fact Sheet
- National Incident Management System (NIMS), Web Page
- Emergency Exercises: An Effective Way to Practice and Validate Emergency Operations Plans, Fact Sheet
- Emergency "Go-Kits" for K-12 Schools, Fact Sheet
- Ensuring the Safe Evacuation of All Students, Staff, and Visitors, Web Page
- Managing Emergency Communications, Alerts, and Warnings/Notifications, Web Page
- Creating, Practicing, and Implementing Plans for Family Reunification Before, During, and After an Emergency, Web Page
- Tool Box, Web Page

Training Opportunities – REMS TA Center

- [School EOP Planning 101: Modifying Exercises and Drills in Response to the Pandemic](#), Webinar
- [Emergency Exercises Package](#), Downloadable Materials
- [Developing and Enhancing Memoranda of Understanding (MOUs) With Your Community Partners Module](#), Specialized Training Package

Further Reading – After-Action Reports

- [After-Action Review Guide](#), Publication (National Comprehensive Center)
- [Campus Resilience Program Exercise Starter Kits (ESKs)](#), Downloadable Materials (U.S. Department of Homeland Security, Office of Academic Engagement)
- [Improvement Planning Templates](#), Preparedness Toolkit (U.S. Department of Homeland Security, Federal Emergency Management Agency)

Further Reading – EOP Development and ICS

- *[School Guide](#)*, Publication (U.S. Departments of Education; Homeland Security, led by the Federal Emergency Management Agency; Justice, led by the Federal Bureau of Investigation; and Health and Human Services)
- *[District Guide](#)*, Publication (U.S. Departments of Education; Homeland Security; Justice; and Health and Human Services)
- *[IHE Guide](#)*, Publication (U.S. Departments of Education; Homeland Security, led by the Federal Emergency Management Agency; Justice, led by the Federal Bureau of Investigation; and Health and Human Services)
- [Incident Command System (ICS) Resource Center](#), Web Page (U.S. Department of Homeland Security, Federal Emergency Management Agency)

READINESS AND EMERGENCY MANAGEMENT FOR SCHOOLS
REMS
TECHNICAL ASSISTANCE CENTER

(855) 781-REMS (7367)

info@remstacenter.org

@remstacenter

https://rems.ed.gov