INDEPENDENT K–12 PRACTITIONER RESOURCE

UNDERSTANDING PROTECTIVE CAPABILITIES

When Conditions Change

Experience, evidence and thoughtful inquiry into prevention, people, systems, protective decisions, care and the conditions that connect them.

GUY M. GRACE

Independent Practitioner Resource | November 2026

Enhancing protective capabilities. Not replacing leading practice.

A READER'S INVITATION

Understanding before instruction

The purpose of this resource is not to establish another national standard or replace the emergency operations plan, protective procedures, or professional practices already serving a school community. It is to invite people to consider what experience, research, and the people closest to an incident may teach us about protecting life.

A student or staff member may recognize danger before the institution knows what is happening. People may have been taught options, or may work out a safer decision from what they can see and understand. Those observations deserve serious consideration. They do not make children responsible for security, and they do not excuse an institution from providing usable warnings, sound physical protection and trained support.

The next pages explore prevention first, then organizational responsibility, human capability, the facilities and technologies that support it, changing conditions, care, and the practical work of verification. The sequence is for learning. During an emergency, a reasonable person may need to act immediately rather than wait for that sequence—or for an announcement—to unfold.

Some sections contain detailed technical questions; others linger over history, uncertainty or a difficult human decision. Both belong here. This is meant to be read, challenged, discussed and tested against local circumstances. The aim is not to prove that one individual or method has all the answers. It is to help another person ask a better question before an emergency asks it for them.

Protect first. Communicate, warn or provide care only when safe. The institution must extend actionable protection to those who have not yet received the warning.

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PART I

Purpose, Philosophy, and Prevention

Why prevention, attention to people and a serious examination of capability matter.

PURPOSE AND APPLICATION

Enhance capabilities; build on leading practice

Additional considerations to strengthen existing prevention, emergency preparedness and protective-action capabilities.

THE PUBLICATION BOUNDARY

This work does **not** propose a new national response model, revise or supersede established leading practice, or replace an approved school emergency operations plan (EOP). It invites teams to **consider additional conditions, strengthen existing capabilities, and verify how people and systems perform together.**

What is being emphasized

FOUNDATION	ADDITIONAL QUESTION
Prevention and intervention	How do we identify, hear, assess, support, and resolve concerns before a crisis?
Human recognition and protective options	What can people reasonably do when danger becomes apparent, before an institution-wide warning reaches them?
Notification and the Missing Seconds	How does useful information travel - and when can people actually achieve protection?
Changing conditions and exterior populations	Do routes, spaces, messages, and accountability work when the default no longer fits?
Care and continuous verification	When safe, who provides help, who is accountable, and who owns correction and retest?

How to use these considerations

Begin with the protective actions and emergency procedures your school already uses. Consider where prevention, the first human recognition of danger, notification, movement, changing conditions and care may expose a gap. Bring the question to the people who own the capability, test its actual performance, and use what you learn to strengthen local plans and training. **Adaptation is a local decision, grounded in evidence, applicable requirements and public-safety coordination.**

Source / method: [S1] U.S. Department of Education K-12 guidance; [S4] CISA K-12 School Security Guide. Applicable code, EOP procedures, and public-safety/AHJ direction continue to control.

PERSPECTIVE, RESPECT AND USE

This resource reflects my evolving perspective: over 40 years in security and K-12 emergency planning; oversight of and response to varied incidents; and work with districts nationwide. It draws on independent research, published guidance, documented incidents, archival training, and lessons from students, families, educators, facilities teams, emergency responders and fellow practitioners. No single incident or affiliation defines the work. Its purpose is practical, nonproprietary learning.

The views expressed may not reflect the positions of current or former employers, professional associations, public agencies, school districts, code officials, public-safety partners, or other practitioners. References to organizations and publications are included for learning, comparison and alignment; they do not imply endorsement of every recommendation in this paper, or endorsement of this paper by the cited organization.

This paper is not a substitute for applicable law, fire and building code, a school or district emergency operations plan (EOP), direction from the authority having jurisdiction (AHJ), or coordination with fire, law enforcement and emergency-management partners. Those requirements matter. They should also not become a reason to avoid hard operational questions. The intent here is to help local teams answer those questions before people must answer them under extreme pressure.

A NOTE ABOUT DIFFICULT SUBJECT MATTER

The document discusses school violence because practitioners have asked difficult questions about conditions that can occur during real emergencies. Incident descriptions are intentionally limited to operational facts needed to teach preparedness. The focus is on protective action, system performance, human capability, care, recovery and improvement - not on the attacker.

The archival presentations, working papers and retrospective materials cited as [P1]-[P4] are my personal practitioner materials. They are included because they document how I was thinking about these problems at the time and how those ideas evolved through later events, research and professional review. They are not offered as official investigative findings, code interpretations, or the positions of any current or former employer or organization.

I reference Arapahoe High School selectively in this paper because I experienced the incident firsthand as the district's Security and Emergency Planning Director and as a responder. I do not use the event as the focus of this resource, nor do I revisit it to reopen painful history, sensationalize what occurred, or assign retrospective blame. I use specific observations only when they help illustrate an operational lesson that may assist another school community. Where official or independent documentation exists, I distinguish that evidence from my own practitioner recollection and interpretation. The principles in this paper are not derived from one incident; they are informed by multiple documented K-12 events, published research and guidance, and practitioner experience.

DIRECT DOES NOT HAVE TO MEAN FEAR-BASED.

A school can speak plainly about danger without sensationalizing it. A school can teach options without turning students into security personnel. A school can protect psychological well-being while still giving children and adults useful answers to reasonable “what if?” questions. This resource argues for that middle ground - calm, honest, age-appropriate, practiced and operationally real.

EXECUTIVE SUMMARY

Schools need clear protective actions. People under stress benefit from simple language, established procedures and practiced expectations. The problem begins when a real emergency presents conditions that the standard drill did not: a violent threat before a schoolwide announcement, students outside the building, a teacher who is unavailable, an unlocked room, a fire alarm during lockdown, smoke in a secure room, a blocked evacuation route, an exterior attack, a failed communication system, or multiple hazards at the same time.

This resource argues that K-12 preparedness must move beyond procedural compliance toward life-safety capability. A default action remains essential. So does an understanding of when immediate conditions make another protective action safer. This is the core of structured adaptability: not improvisation without limits, but a trained ability to recognize danger, use the safest available protection, change action when the conditions truly change, communicate when possible, account for people, and provide care when safe.

THE CENTRAL PREMISE

Emergency procedures provide structure. Appropriate knowledge provides capability. When the expected adult, announcement, route, room, alarm condition or protective action is unavailable or unsafe, students and adults need developmentally appropriate knowledge and practiced options that allow them to move toward safety.

What this paper recommends directly

1. Every occupant should receive developmentally and functionally appropriate life-safety education. Age-appropriate should change the complexity of the information; it should not mean withholding all useful information.
2. Students are not security personnel. They should not be assigned security duties, asked to search for threats, or expected to confront an attacker. They are, however, legitimate participants in their own protection.
3. Developmentally capable students should understand the ordinary doors and protective spaces they use: how a classroom or occupied-space door closes and locks, how to recognize whether it is secured, that they can secure a nearby door during immediate danger when it is safe to do so, and that egress must remain available.
4. Recognition can precede notification. People closest to danger may need to protect themselves before a schoolwide announcement is transmitted. The emergency begins when the danger begins - not when the announcement is made.
5. Options-based preparedness should be understood as structured adaptability: a clear default protective action plus developmentally appropriate permission to change when actual conditions make the default unsafe.
6. A school should not assume that lockdown means every occupant is in a classroom. Exterior areas, arrival, dismissal, buses, athletics, portable buildings, field spaces, parking areas, hallways, restrooms, cafeterias, after-hours users and people separated from normal supervision require explicit planning.
7. During a known or reasonably apparent violent threat, a fire alarm does not automatically cancel a lockdown. Horns, strobes, a prerecorded or synthesized evacuation voice, text/app/email alerts, digital signage and other outputs generated by the alarm sequence are evidence that a fire-system event occurred; they are not, by themselves, a human decision that evacuation is now safer. Occupants should maintain the protective action unless immediate local fire, smoke, heat, structural danger or another directly perceived condition makes the space unsafe, or authorized incident command deliberately issues a change in protective action.
8. Under ordinary conditions, the fire alarm retains its normal meaning and occupants evacuate under the adopted fire plan. The competing-hazard rule applies only when a violent threat is known or reasonably apparent. It is not permission to ignore fire. It is a coordinated method for avoiding movement into a known violent threat while fire conditions are assessed and while occupants remain free to move away from fire or smoke they can directly perceive.
9. The building must be treated as part of the incident. Planning must verify which devices initiate, what the fire panel reports, which doors release or remain secured, what elevators and HVAC/smoke-control systems do,

what voice/text messages are generated automatically, how fire monitoring and dispatch are notified, and whether a later human command can be heard, seen, acknowledged, updated and cancelled. Every automation must have a named owner, a documented cause-and-effect sequence and a tested degraded mode.

10. The procedure must be taught to the people expected to use it. Staff—including substitutes, part-time personnel, volunteers and after-hours users—need role-specific instruction at onboarding, at least annually, and whenever the procedure or system changes. Students need calm, developmentally appropriate instruction. Dispatch, law enforcement, fire/EMS, the fire marshal/AHJ, monitoring providers, communications staff, facilities and system vendors need joint orientation and exercises. Attendance is not proof of learning; teach-back, scenario decisions, observed performance and corrective-action retesting are.
11. Preparedness must account for disability, access and functional needs within every scenario rather than adding those needs as an afterthought.
12. Care, accountability, reunification and recovery are part of the response system. School personnel who act before traditional responders arrive may also carry long-term effects and need support.
13. Lockdown should be treated as a district-wide operating condition supported by layered capabilities - policy, trained people, openings, access control, duress, detection, video, communications, mass notification, networks, incident command, transportation, medical response, reunification and public-safety coordination. A weak handoff between layers can defeat otherwise capable components.
14. Duress should be treated as a life-safety response chain, not merely a button. Districts should define what type of duress is used, where it works, how it communicates, who receives it, whether location is reliable, what protective action it can initiate, how it is acknowledged, how failure is supervised and how the system is tested over time.
15. Weapons-detection analytics and gunshot detection may prompt protective action, but they create information rather than judgment. Districts should define the progression from machine or sensor event to verification, context, school action and public-safety response, while preserving the right of people who directly see or hear danger to act without waiting for technology. [P4]
16. Emergency communications should be designed as a resilient ecosystem. School radios, public-safety LMR, 700/800 MHz or other local public-safety systems, cellular, public-safety broadband, Wi-Fi, private LTE/CBRS, proprietary RF, wired pathways, BDA/DAS/ERRCS where required, and backup power each solve different problems. The plan should define primary and degraded communication paths rather than assume one network will always be available.
17. Mass-notification credibility depends on more than the name of the platform. A legitimate district system can carry an automatic instruction that no human has evaluated. Authenticate the decision—not merely the channel. A pre-scripted or prerecorded message can communicate a valid change only when a designated human deliberately initiates it after deciding to change the protective action. The same words do not constitute such a decision when the fire-alarm sequence launches them automatically.
18. Incident command must close the loop: establish authority and succession; receive and correlate fire, violence and building-system information; decide; issue a population- and location-specific action; confirm delivery and acknowledgement where practical; update or cancel prior messages; preserve the record; account for people; and assign, correct and retest failures. Technology informs and carries command. It does not become command merely because it acts automatically.
19. Transportation must be planned as both an exposure and a response capability. Bus attacks, shootings, hostage situations, bus duress, buses approaching a threatened campus, mid-day driver availability, special-education transportation, alternate loading sites and emergency evacuation capacity all require written coordination rather than assumptions about fleet size.
20. Proof-of-life must cover the whole decision chain: detection, automation, human receipt, human decision, message origin, delivery, intelligibility, acknowledgement where appropriate, occupant action, responder action, accountability, update/cancellation, record preservation, corrective action and retest. A component-level pass does not prove that the handoffs work.

21. Care should include immediate first aid, CPR/AED access, bleeding-control/Stop the Bleed capability where locally adopted and trained, distributed medical supplies, casualty-location reporting, mental-health support, family assistance and long-term recovery. Care resources that cannot be reached during lockdown should not be assumed available.
22. Reunification is an operational capability, not merely a destination. A selected site should be evaluated for capacity, accessibility, communications, power, traffic and bus flow, family processing, security, medical and mental-health support, language access, weather shelter and backup-site options.
23. Incident Command must include continuity of command. A district should assume that the school principal, site command team or normal command location may become unavailable, isolated or overwhelmed and should maintain succession, alternate command locations, district-level command-and-control capability and a path into Unified Command.
24. Student cell phones are both a capability and a complication. Schools should plan for emergency use, device silencing during protective shelter, rumor and family-communication effects, open-campus students, cellular congestion and the reality that public-safety priority services do not extend priority to every student or parent device.
25. An unverified or vague threat should not automatically override a fire alarm or trigger the most restrictive protective action, but unverified does not mean unaddressed. Districts should use proportionate precautions such as threat assessment, law-enforcement/security presence, controlled searches by appropriate personnel, monitoring of exterior and evacuation areas, transportation adjustments and clear escalation triggers.
26. During lockdown, an authenticated change or all-clear is a deliberate decision by a locally designated human authority acting within the incident-command/succession structure—not simply a message delivered through an approved platform. The message should identify the action, the affected population or location, and enough context to distinguish it from an automatic alarm output or an obsolete instruction. Immediate, directly perceived danger remains its own reason to move.

Where this perspective aligns - and where it deliberately adds a practitioner argument

Current federal and national guidance strongly supports trauma-informed, developmentally appropriate planning, multidisciplinary preparation, accessibility, clear procedures, after-action learning and avoidance of deceptive or high-sensorial drills. The 2025 National Academies report goes further by cautioning that options-based practices may present mental, emotional and behavioral health concerns and that evidence is limited regarding which practices are appropriate for which students. That caution deserves respect, not dismissal. [R1] [R2]

This practitioner perspective accepts the caution about high-intensity simulation and rejects the idea that students should be subjected to tactical, frightening or deceptive exercises. It does not, however, conclude that meaningful student agency should be removed. Instead, it distinguishes options-based life-safety education from high-intensity simulation. The recommendation is to teach developmentally appropriate recognition, protective-space use, movement away from danger, route awareness, door knowledge, communication, accountability and care through calm explanation, walkthroughs, short scenarios and supervised practice. That distinction is central to this paper. [R1] [R2] [R6] [R7]

Why the fire-alarm question deserves special treatment

This distinction matters because automation sounds authoritative. A horn, flashing strobe, synthesized voice or district push notification can trigger learned movement before anyone has reconciled the fire condition with the violent threat. That movement may place occupants in corridors, stairs, exits or assembly areas that are exposed and predictable. The paper therefore treats message origin, human authority and system priority as life-safety controls—not wording preferences.

Tennessee Public Chapter 563 requires covered schools to develop a procedure for determining the cause of a fire alarm before evacuation when an active-shooter event is known or suspected, in consultation with local fire and law enforcement and consistent with applicable codes. Tennessee's Spring 2024 guidance calls for trained primary and backup investigators, recognition of fire/hazard indicators and alternate egress, authority to evacuate when indicators appear, a lockdown notice distinct from the fire signal, coordination of prerecorded announcements, annual staff training, integration into safety plans and annual review. The state materials establish an important framework, but local plans still must define the decision rule, automation boundary, scripts, authority, safe investigation method and exercise standard. [R17][R46]

CONTROLLING RULE —
A FIRE ALARM DOES NOT AUTOMATICALLY CANCEL A LOCKDOWN. During a known or reasonably apparent violent threat, automatic horns, strobes, prerecorded/synthesized evacuation voice and connected text/app/email alerts do not by themselves constitute a human decision to evacuate. Maintain reasonable protection unless immediate local fire, smoke, heat, structural danger or another condition makes the location unsafe, or authorized incident command deliberately changes the protective action. Authenticate the decision—not merely the channel.

What the practitioner should do with this resource

Do not simply adopt the words in this document. Use them to challenge the local plan. Walk the building. Ask students and staff what they believe an alarm means. Ask who can initiate a protective action. Ask what happens if the announcement is late. Ask whether a student can operate a classroom lock. Ask what happens on the playground, at dismissal, on a bus loop or at an athletic field. Ask what the fire panel and access-control system actually do. Ask the fire department and police the same scenario and compare their answers. Then exercise the assumptions, document the gaps, correct them and repeat.

Companion resources. Use the 16-page Protective Actions When Conditions Change Practitioner Field Guide for briefing, training and implementation, and the nine-page Fire Alarm During Lockdown Practitioner Decision Guide for the focused decision rule. Identify the immediate decision or action, then use the referenced chapters and appendices here for the supporting analysis and tools.

A GOOD PREPAREDNESS PROGRAM IS WILLING TO CHALLENGE ITSELF.

Source / alignment notes: Primary alignment: [R1]-[R9], [R17]. Practitioner foundations: [P1]-[P4].

BEFORE ANY PROTECTIVE ACTION

Prevention first: the outcome we seek

The strongest protective action may be the one a school never needs to take because a developing danger was recognized and addressed earlier.

Unified Layered School Safety (ULSS) begins well before an immediate threat. School climate, trust, appropriate access to support, multidisciplinary behavioral threat assessment and management (BTAM), supervision, facilities, and routine operational accountability all contribute to prevention. None operates alone.

Strengthen existing prevention functions

CONTRIBUTION	QUESTIONS FOR THE LOCAL TEAM
School belonging, trust and help-seeking	Can students speak to trusted adults? Will concerns be heard without automatic punishment or stigma?
Reporting and response	Are reporting pathways understood and staffed? Is there a timely, proportionate process from report to assessment, support, follow-up and feedback?
BTAM and intervention	Does a trained, multidisciplinary team assess behavior and circumstances rather than rely on a profile, rumor or technology label?
Mental health and student support	Can families and school professionals connect concerns to practical, timely services, including care for people in crisis?
Everyday physical operations	Are doors, visitor processes, supervision, fire protection, communications and maintenance checked for predictable gaps?
Community and public-safety coordination	Are school, families, public safety and community providers clear about who owns which prevention and intervention tasks?

NOT A PREDICTION PROGRAM

Prevention is not profiling. A single behavior, diagnosis, disability, identity or rumor is not a reliable prediction of violence. Evaluate observable facts in context, preserve dignity and rights, and use proportionate, documented interventions.

Source / method: [S3] SchoolSafety.gov Threat Assessment and Reporting Resources for K-12 Schools (Apr. 2025); [S1] U.S. Department of Education school safety guidance. This is practitioner synthesis, not a substitute for BTAM standards or local policy.

PREVENTION / HANDOFFS

From a concern to a completed intervention

Human recognition is also central to prevention: a student or adult may notice a concern before any formal system does.

A prevention handoff needs a receiver

MOMENT	WHAT THE SCHOOL SHOULD BE ABLE TO EXPLAIN
Someone notices a concern	What can a student, family member, teacher, coach or driver report? How can they do it without unnecessary barriers?
A report reaches a person	Who receives it during, after and outside school hours? What if the named adult is unavailable?
Triage and appropriate response	Who determines urgency, gathers context, initiates immediate protection if required, or routes the concern to a multidisciplinary team?
Support and intervention	What practical steps address behavior, grievances, bullying, access to services, dangerous conditions or other specific needs?
Verification and feedback	Who verifies actions occurred, monitors change, safeguards confidentiality and gives an appropriate response to the reporting person?

Two different situations require different pathways

- **Developing concern:** a student tells a trusted adult about increasingly troubling behavior. A multidisciplinary response assesses the context and provides support and appropriate safety measures. Not every report triggers lockdown.
- **Immediate danger:** a staff member directly observes an apparently imminent violent threat. Reasonable self-protection and urgent warning, **only if safe to do so**, may need to begin immediately, before a full BTAM process can operate.
- **Environmental danger:** a technician discovers an unsafe building system or degraded communications pathway. Maintenance, facilities, emergency management and leadership correct and verify the operating condition before reliance.

THE PREVENTION TEST

Did the concern lead to a meaningful, proportionate intervention and follow-up - or did the organization merely record that a report was received? A report is not an intervention.

Source / method: [S3] SchoolSafety.gov threat assessment/reporting; [S1] U.S. Department of Education targeted-violence prevention and K-12 emergency planning. Separate urgent life-safety action from ordinary preventive assessment.

The first minute exposes the assumptions in the plan.

CHAPTER 01 | The Emergency Rarely Follows the Drill

An emergency can begin before a schoolwide warning reaches everyone. People nearest danger may already need to act. Lockdown, evacuation, shelter and reverse evacuation provide essential defaults when information is incomplete. The challenge is ensuring those actions still protect life when the expected adult, route, message or safer space is unavailable.

Real emergencies can begin while students are in hallways, restrooms, cafeterias, gyms, locker rooms, parking lots, buses, athletic fields, portable classrooms or off-campus activity areas. A person may see the danger before administrators do. A fire alarm may activate during an active threat. A secure room may become unsafe because of smoke. The nearest entrance may be on the threat side of the building. The public-address system may be delayed, inaudible or unavailable. The adult who normally directs the group may be absent or injured.

THE PLANNING QUESTION

What would a reasonable student or adult need to know if the expected adult, announcement, route, room, alarm condition or protective action was suddenly unavailable or unsafe?

FEMA and federal school-EOP guidance treat protective actions as functional capabilities within an all-hazards plan. Evacuation, lockdown, shelter, reverse evacuation, communications and reunification are connected rather than isolated. The practical implication is that the plan has to account for changing conditions and multiple functions occurring at once. [R4] [R5]

One firsthand observation informs this discussion. I served as the Security and Emergency Planning Director for Littleton Public Schools and responded to the December 2013 attack at Arapahoe High School. Official post-incident review credited quick reactions by staff and students, including a custodian who initiated a lockdown warning over radio and students who independently concealed themselves, exited dangerous areas or took other protective actions. [R11] I reference that experience here only because it illustrates the first-minute problem: people nearest danger may already be acting before a schoolwide message catches up. My own retrospective reached the same conclusion. [P1]

THE EMERGENCY BEGINS WHEN THE DANGER BEGINS - NOT WHEN THE ANNOUNCEMENT IS MADE.

Source / alignment notes: [R4] [R5] [R11] [P1]

CHAPTER 02 | From Compliance to Capability

A successful drill proves that people followed directions. Could they continue protecting themselves if an assumption changed? Compliance and capability reinforce each other: a clear default reduces confusion, while understanding its purpose helps people respond when the usual route or room becomes unsafe.

Compliance question	Capability question
Did everyone lock down when the announcement played?	Could people protect themselves if they recognized danger before the announcement?

Compliance question	Capability question
Did everyone use the assigned evacuation route?	Could occupants identify and avoid a route that was blocked or led toward a new hazard?
Did everyone remain in the room?	Could occupants recognize when fire, smoke or structural danger made that room unsafe?
Did staff account for students?	Could students who successfully evaded communicate and enter accountability/reunification without returning toward danger?
Did the technology activate?	Did people understand what the technology did, who received it and what action followed?

A drill can be executed perfectly and still fail to build understanding. A student may know how to sit in a designated area during a lockdown drill yet have no idea what to do if they are in a restroom, outside, separated from a teacher or standing beside an empty classroom when immediate danger appears. That gap is the difference between rehearsing a script and building a usable life-safety competency.

PRACTITIONER PRINCIPLE

A successful drill is not merely evidence that people followed instructions. A successful preparedness program develops capability that remains usable when the expected instructions cannot be followed.

The federal 2025 drill guidance emphasizes physical safety and psychological well-being and encourages careful planning before, during and after drills. The National Academies likewise emphasizes learning and skill-building while avoiding unnecessary mental, emotional and behavioral harm. This paper uses that same goal but argues that skill-building must include calm discussion of reasonable “what if?” conditions, not only rehearsal of a single announcement-response sequence. [R1] [R2]

Source / alignment notes: [R1] [R2] [P1]

PART II

District Policy, Procedures, and Governance

The institution’s obligations, locally adopted plans, authority, partnerships and readiness.

The hard questions belong in a multidisciplinary room before they belong in a crisis.

CHAPTER 03 | Build the Team Before Writing the Rule

No single discipline understands the entire emergency. Fire personnel understand fire behavior and code; law enforcement understands violent-threat response; educators know students; mental-health professionals know developmental needs; facilities know buildings; transportation knows moving populations; IT knows networks. Families and students know how procedures are experienced. The team must compare these perspectives before it writes a rule that depends on all of them working together.

Core contributors

- district and building administration;
- security / emergency management;
- local fire department / fire prevention / fire marshal or other AHJ representation as appropriate;
- law enforcement / SRO program;
- EMS and local emergency management;
- facilities, maintenance and custodial leadership;
- fire-alarm, access-control and other system subject-matter experts when needed;
- IT, communications and mass-notification owners;
- school psychology, counseling, behavioral health and crisis-recovery personnel;
- special education, nursing and accessibility/504 expertise;
- transportation, athletics, food service and after-hours operations;
- teachers, substitutes or representatives of instructional staff;
- student and parent/family perspectives appropriate to the issue.

The team should build the rule together by walking the spaces and challenging assumptions. Fire, law enforcement, ECC/PSAP, emergency management, district command, alarm monitoring, facilities, communications and key system providers should hear the same scenario: 'The building is in lockdown, gunfire has been heard, and the fire alarm activates. Horns, strobes, a prerecorded evacuation message and an automatic district text follow. What do occupants do? What does the building do? Who knows which outputs were automatic? Who can change the action? What reaches responders and families?'

The same team should also decide who takes over when normal school command is unavailable. Command succession should be as concrete as door behavior: name the roles, alternates, communication paths and district functions that continue if the impacted school cannot lead transportation, accountability, public information, family assistance or reunification.

GOVERNANCE TEST

If the fire department, police, school administration, facilities team and teaching staff would give different answers to the same first-minute scenario, the plan is not finished.

Source / alignment notes: [R4] [R5] [R17] [R8]

ASSESSMENT / DISTRICT GOVERNANCE

Understand the School Before Choosing the Solution

A vulnerability assessment is not a shopping list. It is a disciplined conversation about the people, places, conditions and capabilities that already exist.

Imagine a school district preparing a major renovation. Its leaders know that some doors need replacement, its radio system is aging, and a new entrance may improve visitor management. Those are legitimate projects. But before deciding which equipment to purchase, the harder question is whether the district understands how the building, grounds, people, daily operations and emergencies interact.

The term vulnerability assessment describes an examination of conditions that may leave people, facilities or operations exposed to harm. A threat assessment examines potential sources and circumstances of harm; a risk assessment considers likelihood or exposure, consequences, existing controls and remaining uncertainty. The terms are sometimes used differently by agencies. What matters here is that a school should examine the actual circumstances before assuming that one product, incident, or checklist defines its needs.

An assessment should look beyond a building perimeter. Consider the bus driver whose radio must function on a remote route, the student who needs a usable interior lock, the teacher responsible for an occupied space with poor visibility, and the visiting team arriving for an evening event. Consider students who communicate differently, facilities staff who maintain doors and emergency power, and responders who must use the building under pressure. These are different experiences of one school environment.

> **The purpose of assessment is not to prove that a school is unsafe. It is to discover what the school actually depends upon, where those dependencies are vulnerable, and what can be strengthened.**

A baseline is a beginning, not a certificate

A useful baseline brings together people who see different parts of the environment: leadership, educators, students and families as appropriate, facilities, transportation, technology, mental health, special education, fire and law enforcement. CISA's K–12 School Security Guide describes a collaborative process of organizing a team, collecting local data, analyzing threats and vulnerabilities, assessing risk and developing a plan. The order helps organize the work; it does not substitute for local judgment or other required assessments. [U1]

A vulnerability finding may be obvious—a door that will not latch—or difficult to see, such as a notification system that silently loses contact with certain receivers. A district may discover that equipment is functioning as designed while people do not understand what it reports, who must respond, or what happens when another system fails. That finding concerns organizational capability as much as technology.

Assessment should challenge the assumptions behind each layer

At the campus level, examine traffic and pedestrian circulation, supervision, lighting, landscaping, access points and exterior gathering locations. At the building level, examine openings, protected spaces, fire and smoke conditions, connectivity, power, emergency notification and responder access. At the human level, examine what students and staff understand, how they report concerns, and whether local plans accommodate the ways people actually move through the school.

The greatest value often lies in the relationships between findings. A campus may have a sound mass-notification system, but poor reception near an athletic field; a well-maintained emergency exit, but an outside destination that becomes unsafe under a different hazard; an accurate digital map, but room labels that no longer match what responders see. One individually satisfactory component can still fail to produce the expected result in the larger protective system.

For this reason, every significant assessment should lead to an honest discussion of consequences, alternatives, accountable owners and evidence needed to determine whether a correction worked. Assessment is not a one-time event that ends when a report is submitted.

CHAPTER 04 | Codes, AHJs and Public-Safety Coordination

Protective actions cannot be designed apart from code-compliant egress and fire protection. Codes are not simply disclaimers to append later. Bring qualified fire, building, safety and public-safety partners into planning early so security, accessibility, responder access and life safety reinforce one another.

Topics to resolve locally

- which fire/building code editions and local amendments apply;
- how classroom and occupied-space locking complies with egress, panic/fire hardware and fire-door requirements;
- what electronically controlled openings do on fire alarm and power loss;
- how emergency responder access is maintained to secured spaces;
- whether a delayed-evacuation/cause-determination procedure is required or permitted locally, how it operates during a known or suspected violent threat, and what happens when the cause cannot be safely determined;
- who is authorized and trained as primary/backup alarm investigators, what remote information is used first, and what conditions prohibit sending a person toward the alarm origin;
- which fire-alarm and notification outputs are automatic, how their origin is disclosed to command, and how a deliberate human update can be issued, heard, seen, acknowledged, updated, cancelled and logged;
- what conditions require immediate evacuation regardless of the violent-threat protective posture;
- how school command and public safety authenticate the human decision behind a change/all-clear—not merely the platform that carries it;
- how local plans address code changes, renovations and system upgrades over time.

ICC Section 1010.2.8 illustrates the balance for educational locking: prevent unauthorized entry while keeping the door openable from the egress side and preserving approved outside access, with restrictions on modification of panic hardware, fire-door hardware and closers. [R9] The local adopted code is controlling.

The practitioner lesson is that security should not be designed against fire/life safety; both should be solved as one operating problem.

Tennessee Public Chapter 563 and the Spring 2024 state guidance are instructive because they require a local cause-determination procedure, consultation with fire and law enforcement, code compliance, trained primary/backup personnel, annual staff training, safety-plan integration and annual review. They do not supply every district with one statewide script or technology design. Local implementation must make the decision boundary and training evidence explicit. [R17][R46]

Source / alignment notes: [R9] [R17] [R4]

GOVERNANCE / LIVING READINESS

The Emergency Operations Plan Must Describe the School That Exists Today

An EOP is a written expression of operational capability. Its value depends on whether the organization, its people and its systems can still carry it out.

Consider a school where the approved emergency plan identifies a certain classroom wing as a protective location. Over several years, construction changes the wing, enrollment changes how it is used, and a door is replaced with a different locking arrangement. The plan may still read smoothly. But does it still describe the building people occupy?

An Emergency Operations Plan (EOP) is the school's locally developed framework for coordinating prevention, preparedness, response and recovery. It should describe responsibilities, decision authority, communication, protective actions, accessibility, transportation, accountability, reunification and recovery in ways that can be understood and exercised. An EOP is not made operational merely by being approved or distributed.

The U.S. Department of Education describes high-quality school EOPs as collaboratively developed, regularly reviewed and reinforced through training and exercises. Schools must align local procedures with applicable law, adopted codes, fire and law-enforcement coordination, and authority-having-jurisdiction decisions. The national guidance supports continuous improvement; it does not authorize a school to override its local requirements. [U3]

Every material change asks an operational question

A renovation can change doors, locks, room numbers, radio coverage, access routes and evacuation movement. A new duress system can change the path from human recognition to public-safety notification. A new administrator may change the practical continuity of command. A staffing or transportation change may make an established responsibility impossible at the time the plan assumes it will occur.

The right question is not simply whether the new information has been inserted into the binder. It is whether people have learned the revised arrangement, whether the linked systems behave as expected, and whether someone has verified the handoffs that make the plan usable.

> **A plan that has not been revisited after the conditions changed may describe yesterday's school, not today's protective capability.**

A recurring rhythm of assessment and revision

A school needs both broad, multidisciplinary reassessment and more frequent functional checks. A comprehensive review can examine the environment and strategy. Functional inspections can verify door closers, locks, hardware, alarm panels, public-address intelligibility, duress coverage, radio communication, maps, power and accessible routes. Change-triggered reviews should follow meaningful construction, software, staffing, policy or operational changes, and credible lessons from exercises or actual events.

The record must connect observation to action. What changed? Who identified it? Which people or systems are affected? What temporary protection is appropriate? Who owns correction? How will the organization know that the function is restored? When must the related EOP, staff instruction, responder information or training be changed?

This is not a request that every district adopt a new administrative burden or a prescriptive schedule from this publication. The cadence and responsibilities must reflect the school's risks, resources, laws and existing governance. The point is that known conditions do not remain known forever without deliberate maintenance and verification.

Keep people in the loop

No EOP should live only in one office or behind one login. District leadership, school personnel, substitutes, facilities, transportation, public-safety partners and other relevant people need the portions of the plan that relate to their decisions. Student and family perspectives should inform understandable protective actions without exposing sensitive records or transferring professional response responsibilities to children.

What the school discovers through assessment should shape policies; what the school experiences through practice should then shape the next assessment. This is how a living plan becomes an organizational capability rather than a static artifact.

PART III

Human Roles, Recognition, and Empowerment

The people who see, hear, interpret, think and sometimes act before any central warning.

Useful information can be direct, calm and developmentally appropriate.

CHAPTER 05 | Knowledge, Options and the Reduction of Helplessness

An emergency can leave someone frightened, separated from familiar adults or uncertain what to do. Preparedness cannot promise calm or perfect reactions, and freezing is not a failure. Its aim is to replace some unknowns with age-appropriate options: recognize danger, reach protection, move away when safer, communicate when safe, account for people and provide care.

In my legacy LPS training, I acknowledged startle, fear, anxiety, disbelief, noise and incomplete information. Its central teaching was that knowing available options can help people regain composure and commit to action. [P2] That is closer to first-aid, fire-safety and severe-weather education than to theatrical tactical simulation: explain the hazard in appropriate terms, teach a small number of useful actions, practice them without deception, and reinforce that adults and responders have larger responsibilities.

KNOWLEDGE, OPTIONS AND AGENCY

Appropriate knowledge creates capability. Capability can reduce helplessness. Preparedness should give people a mental starting point without pretending it can guarantee how any individual will react under extreme stress.

The National Academies identifies practices least likely to cause mental, emotional and behavioral harm, including trauma-informed, developmentally appropriate approaches, discussion-based practices, accessibility adaptations and post-drill support. It also warns that options-based practices should be implemented with caution because the evidence base is limited and suitability can vary by age, functional need and trauma history. [R1] This paper takes that caution seriously. It does not recommend high-intensity options drills for every student. It recommends developmentally tailored life-safety education that gives people reasonable answers to reasonable questions.

Questions education should answer without sensationalism

- What should I do if I recognize immediate danger before the schoolwide announcement?
- What if I am not with my teacher or normal group?
- What if the nearest safe room is empty?
- What if the normal route is unsafe?
- What if I am outside and the threat is outside too?
- What if the fire alarm activates during lockdown?
- What if I successfully leave campus - where do I go and how am I accounted for?
- What if a friend needs help after we are reasonably safe?

Source / alignment notes: [R1] [R2] [R6] [R7] [P2]

CHAPTER 06 | Trauma-Informed Does Not Mean Information-Deprived

A child may hear about violence or emergencies through rumors long before receiving a trusted explanation. Trauma-informed preparedness offers calm, developmentally appropriate information rather than silence. Language, intensity, timing, participation, accessibility and support matter. Respecting psychological well-being and teaching useful protective knowledge are compatible responsibilities.

The 2025 National Academies report recommends trauma-informed and developmentally appropriate drills, and recommends against student-involved high-intensity or high-sensorial simulations and deception. [R1] The U.S. Department of Education similarly centers physical and psychological safety. [R2] NASP materials emphasize minimizing potential physical and psychological harm in armed-intruder preparation, while PREPaRE places crisis planning within a broader system of prevention, response and recovery. [R7] [R8]

Avoid	Prefer
Surprise/deception that makes participants believe an attack is real	Prior notice and clear distinction between education, drill and exercise
Simulated gunfire, graphic injury, fake blood or theatrical attackers for students	Discussion, walkthrough, route familiarity, simple scenario prompts and supervised practice
Tactical detail beyond the learner's role	Role-appropriate protective knowledge
One-size-fits-all participation	Developmental, disability, trauma-history and individual-readiness considerations
Measuring success only by compliance	Measure understanding, confusion, usability, system function and well-being

DIRECT AND TRAUMA-INFORMED CAN COEXIST

A school can say: "If danger is immediately apparent, you do not have to stand exposed waiting for an announcement. Move toward the safer option you have been taught." That is direct. It is also very different from staging a frightening attack simulation.

Source / alignment notes: [R1] [R2] [R7] [R8]

PART III

DEVELOPMENTAL READINESS

The complexity changes. The right to useful safety information does not disappear.

CHAPTER 07 | Developmental Levels of Safety Awareness

A kindergartner, a teenager and a trained adult do not need identical emergency instruction. Developmentally appropriate means matching language, complexity, practice and expected independence to the learner, not withholding all useful information. The progression described in SchoolSafety.gov and Safe and Sound Schools materials recognizes that readiness also varies with disability, culture, psychological background, education and individual needs. A good program teaches what each learner can reasonably do without assigning children adult security duties.

Developmental band	Core life-safety learning	What should not be expected
Early / Pre-K-K	Recognize trusted adults; stop, look and listen; move with the group; go to a safer place; stay quiet when asked; ask for help.	Independent threat assessment, tactical decisions, confrontation or complex route selection.
Developing / early elementary	Understand basic alerts; close a door with an adult; move away from obvious danger; know simple safe-place and reunification expectations.	Adult-level command decisions or responsibility for classmates.
Practiced / upper elementary	Assist with simple emergency actions; understand a nearby safer room; basic 911/reporting concepts; recognize that the normal route may change.	Being relied upon to perform a protective action for others.
Proficient / middle school	Perform practiced protective actions more independently; use nearby exits/routes; secure a room if capable; communicate and account when safe.	Professional security tasks or mandatory confrontation.
Independent / high school	Adapt learned life-safety actions to location and conditions; understand shelter vs. movement; help peers when safe; know accountability/reunification; secure normal occupied-space doors.	Expectation to search, clear, pursue or physically stop an attacker.
Adults / trained staff	Initiate protocols as locally authorized; lead students; adapt protective actions; account; communicate; support access needs; begin care when safe.	Perfect information or flawless performance under extreme stress.
Professional responders	Command, tactical response, rescue, medical operations, investigation and coordinated public-safety functions.	Transfer of responder duties to school occupants.

The key is developmental progression. A young child may primarily learn to move with a trusted adult and recognize a safer place. An older student may learn that if immediate danger is visible in one direction, they do not have to move toward it simply because that is the normal route. A high-school student may reasonably learn how the classroom door operates, when remaining protected is safer, and how to communicate after self-evacuating. These are different levels of the same life-safety objective.

PRACTITIONER PRINCIPLE

Developmental appropriateness should determine the complexity of the decision - not whether the student is permitted to protect themselves.

Source / alignment notes: [R6] [R1] [R2]

CHAPTER 08 | Empowerment Is Not Deputization

A student who recognizes immediate danger may need to act before an adult speaks. That does not make the student a security officer. Planning, supervision, threat assessment, command and public-safety response remain adult responsibilities. Empowerment means understanding reasonable self-protective options, never assigning children to patrol, investigate or confront.

Students should not be assigned to

- check exterior doors, patrol hallways or perform routine security rounds;
- search for a threat, clear rooms, locate a weapon or approach suspicious persons;
- leave a safer location in order to secure another area;
- physically confront an attacker as an expected or graded response;
- make law-enforcement or incident-command decisions;
- assume responsibility for the safety of a class, building or campus.

Students may nevertheless need to

- recognize that something is dangerously wrong and move away;
- enter the nearest reasonable safer space rather than remain exposed;
- close and secure a nearby door if developmentally and physically capable;
- use an alternate exit or route when the normal route leads toward obvious danger;
- call 911 or report what they saw when safe and appropriate;
- help a peer move toward safety when doing so does not create another victim;
- remain at an off-campus safer location and make themselves accountable rather than returning toward the school.

THE DISTINCTION

We are not giving children security responsibilities. We are giving them life-safety knowledge.

The Safe and Sound developmental framework is useful here because it recognizes progressively greater capability without making student action an institutional dependency. [R6] This paper adopts the same boundary: teach useful capability, but never build a plan that requires a child to perform a security function for the system to work.

Source / alignment notes: [R6] [R1] [P2]

CHAPTER 09 | Student Door Knowledge as a Life-Safety Competency

Can a student secure an ordinary classroom door when an adult is unavailable? Doors are familiar but consequential protective features, yet occupants may never have learned how they latch or lock. A developmentally capable student may need to close and secure a door because an adult is absent, injured or unable to reach it. The same student may need to recognize when not to open that door into an apparent

threat, or when to use the door for egress because fire, smoke or another condition has made the room unsafe. Door literacy therefore includes both protection from entry and safe exit.

RECOMMENDED COMPETENCY

Developmentally capable students should understand how to close and secure the ordinary classroom or occupied-space doors they use, how to recognize whether the door is secured, how to maintain free egress, and that securing a nearby door may be an appropriate protective action when immediate danger is apparent and doing so can be accomplished without moving toward danger.

This is not a recommendation that students carry keys, administer access-control systems, defeat door hardware or perform routine security checks. It is basic protective-environment literacy. The person who reaches an empty classroom first during a crisis should not remain exposed simply because only adults were ever shown how the lock works.

Door literacy should include

- how the door normally closes and latches;
- how the classroom/occupied-space locking function is operated from the room side, where allowed by local hardware and policy;
- how occupants can verify, as simply as practical, that the door is actually secured;
- how occupants can leave without special knowledge, tools or keys;
- why doors should not be propped or defeated during normal operations;
- why students should not leave safety to lock another area;
- what to do if the door does not latch or lock as expected - use another available protective option rather than assuming protection exists.
- why an occupant should not open a secured door solely because someone knocks, calls out or requests entry when the threat remains unresolved;
- how to look/listen for immediately observable danger before opening when local practice and the situation require a decision;
- how to use the door for normal code-compliant egress if remaining in the space becomes more dangerous; and
- what the school defines as an authenticated all-clear or responder release so rumor, text messages or an unknown voice outside the room do not become the release protocol.

What the evidence shows - and what I take from it as a practitioner

The 2026 ALERRT Center/Security Industry Association study reviewed 54 K-12 active-shooter incidents from 2000 through 2025 and found a recurring operational pattern: attackers most often succeeded at openings that were unsecured rather than by defeating a functioning lock. The published findings report that 69 percent of successful perpetrator entries were through unsecured doors, 61.7 percent of doors in the examined interactions were unlocked or intentionally propped, and no functioning locked door in the data set was successfully breached by defeating the locking mechanism. The authors appropriately characterize the study as descriptive evidence rather than a guarantee of outcome. [R40]

Apalachee High School provides a particularly clear student-level illustration of why door knowledge includes both securing a door and deciding not to open one. Public reporting based on student interviews describes 14-year-old Bri Jones looking before opening a classroom door, seeing the attacker producing a rifle and warning the teacher not to open it. Separate reporting describes student Landon Culver hearing gunfire, seeing an armed person, running back into a classroom and locking the door. Student Ronaldo Vega, after the attacker left his classroom, described getting up and closing the door so the attacker could not return. These

are not examples of students being assigned security responsibility. They are examples of students using immediate observations and a basic protective feature to reduce exposure. [R41][R42]

The ALERRT report does not prescribe a national student curriculum for lock operation. The following is my practitioner interpretation of the evidence: if doors protect only when they are actually secured, and adults may sometimes be absent, injured or unable to reach the opening, then developmentally capable students should understand the ordinary door hardware in the spaces they occupy. That instruction should remain simple, code-compliant and bounded - protect yourself and others who are already there; do not leave safety to perform security duties elsewhere.

Code compliance is non-negotiable. The 2021 IBC educational-occupancy locking provision requires classroom and other occupied-room doors designed to prevent intruder entry to remain openable from inside and to be unlockable from outside by key or approved means, and it prohibits unapproved modifications to listed panic hardware, fire-door hardware and closers. [R9] Local adopted code and AHJ direction control. The broader point remains: a code-compliant protective opening is only a capability when people know how to use it.

A LOCK IS NOT A CAPABILITY IF THE OCCUPANTS DO NOT KNOW HOW TO USE IT.

Source / alignment notes: [R9] [R11] [P1] [P2]

CHAPTER 10 | Recognition, Notification and Permission to Act

A student, teacher or custodian may recognize danger while others remain unaware. The Missing Seconds lie between recognition, warning and protection. People may need to act before notification reaches them; they should communicate only when safe. The school must extend usable warnings beyond the first witness.

Indicators that may reasonably justify immediate protective action

- an official lockdown or active-threat announcement;
- direct staff, security, law-enforcement or emergency notification;
- direct observation of a person presenting an apparent imminent violent threat or weapon;
- gunfire or other sounds reasonably believed to represent serious violence;
- direct observation of an assault or attack;
- an urgent warning from a nearby person who appears to have immediate knowledge of a shooting or violent threat;
- other immediate circumstances that would cause a reasonable person to believe life-threatening violence is occurring.

The threshold is not every rumor, ambiguous noise or unverified social-media post. The point is that people should not be trained to disregard immediate, reasonably apparent danger simply because institutional confirmation has not yet arrived.

Institutional timeline	Human timeline
Detect / receive report	See / hear / sense abnormal danger
Verify / clarify	Recognize
Notify / activate protocol	Decide
Command / coordinate	Act to protect life
Update / manage common operating picture	Adapt as new information arrives

Arapahoe is an important example. The post-incident review reported that a custodian ordered lockdown over radio on his own initiative after seeing the aggressor with a shotgun, while students and staff in the immediate area took protective action rapidly. The review specifically identified staff empowerment and student independent action as life-saving lessons. [R11] In my retrospective, I emphasized that the first people in line of sight could not wait for a perfect announcement. [P1]

KEY RULE

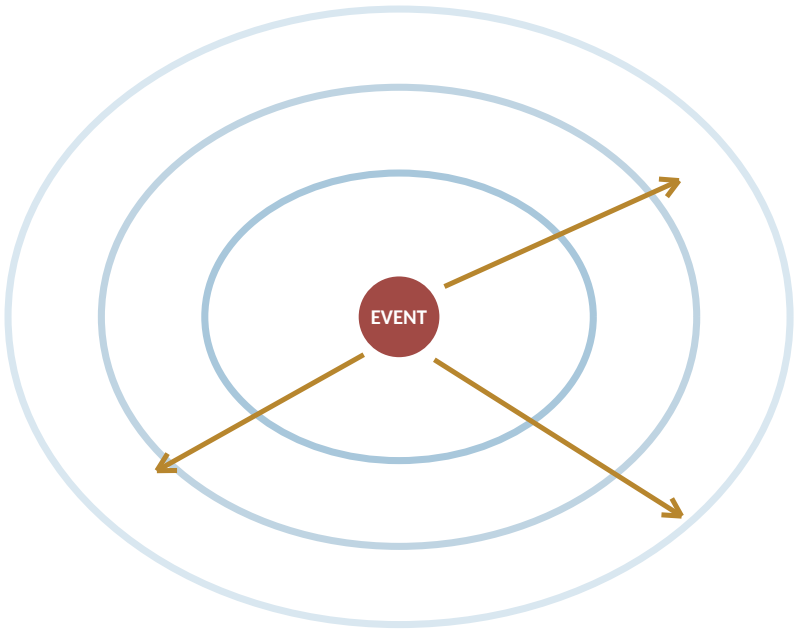
Do not make centralized notification a prerequisite for immediate self-protection when life-threatening danger is reasonably apparent.

Source / alignment notes: [R11] [P1] [P2]

THE MISSING SECONDS / VISUAL

A stone strikes the water - ripples are uneven

The incident begins locally. Often, people nearby recognize danger before the institution holds a common operating picture.



RECOGNIZE
People nearest danger may recognize and act first.

WARN
Voice, radio, duress and nearby human warnings extend awareness.

REACH
Distant classrooms, exterior groups and buses may hear later.

REASSESS
Gaps, stale information and changed conditions require updates.

THE ANALOGY IS DELIBERATELY IMPERFECT

A still pond produces regular ripples. School campuses do not: buildings, walls, human interpretation, separate networks, staffing, noise, accessibility needs and changing danger create unequal paths and overlapping local timelines.

The three clocks are different

RECOGNITION	NOTIFICATION	PROTECTION
When a person first knows or reasonably perceives danger.	When actionable information reaches another intended recipient.	When that recipient can actually take a fitting protective action.

Source / method: Conceptual figure, not a quantitative model. Practitioner synthesis from Chs. 01, 10, 13, 15–16; supported by [S1] U.S. Department of Education school response guidance.

THE MISSING SECONDS / THREE CLOCKS

Notification is not proof of protection

A warning may reach the far end of a building while another occupant has already sheltered; a person may hear an alarm without a usable protective option.

Watch the handoffs, not a single stopwatch

STAGE	FAILURE OR DELAY TO EXAMINE	EVIDENCE OF CAPABILITY
Human recognition	People dismiss a credible immediate danger, wait for an adult, or lack a way to describe what they observed.	Age-appropriate teach-back; policy permits reasonable self-protection.
Immediate local action	A person delays safe movement or protection to find a device or contact another person.	Choices are known; ordinary doors and routes work; no unsafe duty to report.
Warning initiation	Only one administrator or inaccessible button can start notification.	Multiple approved, simple, supervised initiation paths.
Receipt and interpretation	An alarm arrives with wrong location, unclear meaning, no staffed recipient or no acknowledgement.	Useful source/location, roles and escalation, differentiated assistance vs violent-threat signals.
Distribution and comprehension	PA fails outdoors, a bus is unreachable, a substitute misunderstands codes, inaccessible format.	Plain-language, redundant, accessible and audience-specific warning verified at real locations.
Effective protection	Door fails, wrong route, delayed mobility assistance, outdated threat location or conflicting automatic message.	Observed protected conditions, workable alternatives, accountability and safe updates.

OPERATIONAL TEST

The clock that matters is not only *time to send*. It is the interval from first relevant recognition to the point each affected person can achieve reasonable protection. These intervals vary across the school; a single average can hide critical gaps.

Source / method: Chs. 10, 13, 15–16 and Appendices J, K, N; [S1] federal K-12 response guidance. No universal time threshold is asserted here.

THE MISSING SECONDS / SCENARIO

One event, several different local timelines

Hypothetical adult tabletop: a large school near dismissal, with the first human observations originating close to a busy exterior entrance.

LOCAL PERSPECTIVE	WHAT THAT PERSON MAY KNOW	WHAT CAPABILITY IS NEEDED
Student near the entry	Recognizes immediate violent danger before a schoolwide message.	Shelter or move away without waiting; warn when safe, not at the expense of self-protection.
Custodian in adjacent zone	Hears or sees a serious threat and can reach an authorized radio/duress control.	Protect self; warn or activate when safe; transmission reaches a trained receiver.
Teacher in distant classroom	Hears a message but not the exact threat location.	Understand plain language; secure an appropriate space; remain ready to reassess.
Students moving to exit	May not yet have received the warning, or the normal exit is toward danger.	Avoid newly unsafe movement; use another available safer path; become accountable.
Coach and group outdoors	May not hear interior PA, and the threat may be between the group and the building.	Independent exterior notification and multiple practical options away from danger.
Bus approaching school	May be outside the school notification network.	Transportation dispatch receives warning, stops inbound exposure, documents group location.

Facilitator debrief - ask in this order

- Who recognized danger first? What could that individual safely do immediately - even before any official warning?
- Which other populations could already have acted independently? Who still lacked actionable information?
- When information changed, did command issue an updated instruction that reached the same recipients?
- Did the school account for those who moved to different reasonably safer destinations?

Source / method: Illustrative scenario created for discussion, not a reconstruction of any event. Use with Appendix H, Appendix R and local EOP/public-safety procedures.

THE MISSING SECONDS / DOCUMENTED HISTORY

Four incidents, four different lessons

The historical record can reveal warning and protection gaps. It cannot establish one universal tactic or prove a fixed interval in every incident.

EVENT	DOCUMENTED FACT / SOURCE	PRACTITIONER QUESTION
Arapahoe High School, CO (2013)	Independent review discusses a custodian's rapid warning over radio and actions by staff/students. The author also has separately labeled firsthand experience. [S8]	What could people nearest danger do before an institution-wide picture existed?

Marjory Stoneman Douglas HS, FL (2018)	Florida commission estimated first Code Red over school radio at about 2:24:54 - 3 min. 16 sec. after first shots; it identified unequal information during a fire-alarm condition. [S6]	Which links between recognition, initiation and useful warning delayed or fragmented awareness?
Sparks Middle School, NV (2013)	FBI incident chronology records that the shooting began outside school at 7:16 a.m. [S7]	What protective options and notification methods reach people outside before class begins?
Westside Middle School, AR (1998)	National Research Council case history describes a deliberately triggered fire alarm and evacuation into exterior danger. [S9]	Could movement away from the building become unsafe because danger is outside?

Evidence discipline

The documented sequence, timing and uncertainties must be cited precisely. A historical example supports a planning question; it does **not** prove a particular technology, training model, policy, rally point or movement decision would have changed that outcome. The author's recollections are explicitly separate from official records.

WHY FOUR DIFFERENT INCIDENTS?

To prevent one tragedy from defining the framework. The shared lesson is broader: people, locations and systems can hold different information and different protective options during one developing emergency.

Source / method: [S6] Florida MSDHS Public Safety Commission initial report (2019), ch. 4; [S7] FBI active-shooter incident report; [S8] Safe Havens post-incident review; [S9] National Research Council Westside case.

THE MISSING SECONDS / HUMAN-FIRST

Protect first; communicate only if safe

The first person noticing danger must not become the organization's only detection, warning, or response mechanism.

UNAMBIGUOUS INDIVIDUAL BOUNDARY

A student, teacher, custodian, coach, bus driver or visitor who encounters immediate danger may need to move or shelter first. Warning, calling 911, activating duress, assisting others, or reporting location should happen **only if safe to do so**. Do not require return toward danger or delay self-protection.

Build an institutional response that supports the witness

RESPONSE DESIGN	WHY IT HELPS
Distinct assistance and immediate-threat signals	A staff-assistance request, medical emergency and immediate violent-threat warning may require different protective responses.
Multiple authorized initiation paths	Fixed, portable, radio or other approved methods reduce dependence on a single person, room or device.
Supervised infrastructure	Receiver outages, batteries, gateway faults and missed check-ins require a known monitoring/repair owner.
Appropriate integration	The right recipient, location, message, dispatch interface and protective-action authority must connect without unnecessary delays.
Recognition without a device	Staff and students still understand nearby protection when technology, their normal adult, or an announcement is unavailable.

What if the initial person cannot report?

Plan for overlap: another occupant may recognize the condition; a staffed or monitored system may detect relevant signals independently; an authorized person may initiate local protection; and backup communication can carry the warning. None is guaranteed. The point is to identify single points of failure before an emergency.

Source / method: Chs. 10, 15 and Appendix N; [S1] K-12 federal school-response guidance; [S4] CISA layered security. Duress architecture is descriptive and vendor-neutral.

CHAPTER 11 | Parents and Students as Preparedness Partners

Parents deserve to understand what their children are taught about emergencies before a frightening incident or confusing drill. Trust grows when schools explain protective options, developmental limits, what will not be simulated and how care and reunification work. Transparency allows families to ask questions, identify accessibility concerns and support calm, practical preparedness at home.

Parent communication should explain

- why preparedness is taught and how rare high-consequence hazards fit within an all-hazards approach;
- what students will hear and do at each developmental level;
- what will not be used - deception, graphic injury, surprise attack simulation or age-inappropriate tactical content;
- how students are taught to follow adults while still having simple protective options when adults are unavailable;
- how doors, evacuation, exterior areas, fire alarms and reunification are addressed;
- how parents can reinforce calm preparedness language at home;
- how students with trauma histories, disability, medical or access needs are supported;
- how families can ask questions, observe appropriate instruction, or provide feedback.

Student voice is evidence. After calm instruction or an age-appropriate exercise, ask learners to explain in their own words what the fire alarm normally means, what changes during a known violent threat, how they recognize an immediate local fire condition, what they would do if separated from an adult, how they would use a safer route, and how they become accountable. Misunderstanding should trigger reteaching and retest—not blame.

TRUST-BUILDING PRINCIPLE

Explain the training before asking families to trust the training.

Source / alignment notes: [R1] [R2] [R6]

ACCESSIBILITY, CARE AND RECOVERY

A plan that works only for the easiest person to move is not ready.

CHAPTER 12 | Disability, Access and Functional Needs

Could every person receive the warning, secure the door or use the planned route? Accessibility is not a separate afterthought. Test each protective action for students, employees and visitors with mobility, communication, sensory, cognitive, medical and other access or functional needs.

The National Academies emphasizes accessibility adaptations in drill planning and warns that options-based practices may not be suitable for every individual or group. [R1] The Safe and Sound developmental model likewise states that readiness levels vary and that psychological background and special educational needs must be considered. [R6] These are reasons to individualize and support preparedness - not reasons to exclude people from all understanding of life-safety actions.

Planning questions

- Can the person physically use the designated route, door, safer space or off-campus destination?
- Does an alarm use visual, audible and/or other accessible notification appropriate to the population?
- What happens if mobility equipment is not immediately available?
- Who assists, and what happens when the usual assistant is not present?
- Are backup communication methods available for people who cannot hear, speak or process the primary message?
- Are medications, medical devices, service animals and time-sensitive needs considered?
- Do sensory or behavioral needs require a different way to teach and practice the protective action?
- Can the individual leave a secured room without a key or specialized maneuver?
- Does the reunification process preserve medical, behavioral and communication supports?

INTEGRATION RULE

Do not ask “What is the special-needs plan?” after the main plan is written. Ask “Does this protective action work for everyone who may actually be here?” while the plan is being built.

In my legacy LPS training, I made an early effort to discuss mobility, medical, sensory and individualized needs. [P2] Terminology and practices should be modernized with current special-education, disability, accessibility, school-health and family input. The durable lesson is that capability must be individualized enough to be real.

Source / alignment notes: [R1] [R2] [R6] [P2]

PART IV

ULSS Layers, Components, and Supporting Technology

The technology, physical environments and human understanding that must work together.

ULSS / UNDERSTAND BEFORE YOU BUY

What these protective systems actually do

A school official may know the name of a system without knowing what it does for the people who depend on it. A teacher may be handed a device, a facilities team may receive a new panel, and administrators may approve an integration that no one has tested under the same emergency conditions. The challenge is not unfamiliar vocabulary. It is the difference between an installed component and a capability that reaches people when it matters.

Begin with a person and a condition. Then examine what the system makes possible, what it requires, what it cannot know, and how someone verifies its contribution.

Doors, locking, and access control

A classroom door can provide separation from immediate danger only when it can close, latch and be secured in the manner intended. Access control governs who may enter through designated openings; it does not prove a door physically latched merely because software says “locked.” Occupants need understandable operation and immediate lawful egress. Facilities personnel need hardware knowledge, maintenance responsibility and a test of door behavior during alarm, power loss and lockdown.

Duress and emergency notification

A duress device gives a person a way to signal a need for help when doing so is safe. A notification capability carries understandable protective information to the people who need it—sometimes far from the initiating person or even off campus. Neither is the same as a complete intervention. The full route through receipt, interpretation, dispatch, protective action, updates and accountability must be understood and practiced.

Detection, video, and monitoring

Cameras and detection systems can provide evidence and alerts, but their meaning depends on field conditions, context, trained observation and decisions. A platform may generate information at a speed no human can match; it may also produce a mistaken candidate event, a missed detection or information that arrives too late. Monitoring must have a named receiver and an appropriate response pathway.

Radios, PA, networks, and emergency power

Radios, voice systems, cellular services, school networks, public-safety communications, backup power and emergency alert services provide different parts of the communications ecosystem. A failure in one part may interrupt several other functions at once. Coverage, intelligibility, accessible messaging, staffing, redundancy and handoffs are distinct questions; no single “communication works” checkbox answers all of them.

Why the layers must talk to one another

In Unified Layered School Safety, the focus is not collecting components. It is connecting prevention, people, policy, facilities, operations and technology so that a reasonable protective decision is possible and supportable. When an emergency begins, a system should help people recognize, understand, respond and adapt. The chapters that follow examine the specific dependencies and how schools can investigate the conditions they actually face.

ULSS COMPONENTS / INFORMATION IN PLACE

Emergency Mapping: What It Is and Why It Matters in K–12

A map can be technically accurate and still fail a frightened person or a responder who cannot identify the place being reported.

Imagine a student who reports that help is needed near a room whose number changed during a renovation. A dispatcher, school office and responding agency each have a different map or use a different name. Every person may be trying to do the right thing, yet precious time can be spent determining where the event actually is.

Emergency mapping is the organized representation of buildings and grounds so school personnel and authorized responders can identify locations and understand relevant physical features. It can include paper floor plans, controlled digital diagrams, geospatial information systems (GIS), or a combination. GIS connects mapped features to coordinates or other location data so users can search, compare and update information. The term does not mean that every district needs a complex mapping platform.

In a school, useful information may include current building and room identifiers, floor levels, exterior doors and gates, accessible routes, public-safety entry points, fire-alarm zones, utilities, first-aid equipment and common areas. Some systems connect selected alarms or cameras to their mapped locations; others provide a reliable static plan that trained people can interpret quickly. Actual capabilities vary by platform and local practice.

The map is only one part of a location conversation

A map cannot speak for an individual who cannot describe their position, and it cannot guarantee that a responder's displayed location matches the actual door or room. A school should compare the map with the building itself: physical labels, door and camera names, dispatch conventions, campus changes and the language people use when reporting an emergency.

The assessment should ask whether a report of "north gym," a numbered exterior door or a portable classroom leads different authorized users to the same location. It should test retrieval during power or network failure, the usability of a controlled offline copy, and the ability to guide personnel who have never visited the campus.

> **A location is not shared merely because several systems display the same dot. It is shared when the people receiving the information can locate the same real place.**

A living campus requires living information

Maps age when classrooms are reassigned, fencing moves, construction closes an entrance, new buildings are occupied, or security devices are renamed. The facilities team should own physical accuracy in coordination with GIS/technology, emergency planning, public-safety partners and authorized dispatch users. A change should trigger an update, distribution to the right people, retirement of obsolete versions and an observed test.

Mapping is also a security and privacy issue. Public educational materials can explain what categories of information belong in a response map. Detailed access arrangements, protected individual information, sensitive infrastructure and actual response routes should be controlled under district policy rather than included in an unrestricted public appendix.

The goal is not to purchase mapping because it is fashionable or required elsewhere. It is to help the institution connect an actual report to an actual place with clear, current, authorized information. CISA's emergency-action planning guidance and Department of Education school-safety resources both emphasize sharing usable facility information with appropriate responders. [U4][U5]

CHAPTER 13 | Communications, Utilities and Technology Failure

A radio that works during a drill may fail under changing conditions. Plans should anticipate cellular congestion, device failures, damaged infrastructure, delayed activation,

conflicting reports and overwhelming information demand. Technology remains valuable; redundancy and human authority make it resilient.

Plan for degraded communications

- Who can initiate a building protective action if the principal/office cannot?
- What happens if the PA cannot be heard in exterior areas, gyms, mechanical spaces or buses?
- What is the backup when cellular service is overloaded or unavailable?
- Can radios interoperate with district/public-safety partners where intended?
- Does the message identify useful threat location information when known, without delaying activation?
- How do substitutes, visitors and after-hours users receive the message?
- How are updates authenticated so occupants do not open doors or move based on rumor?
- What manual processes replace access control, video, electronic rosters or visitor systems if networks fail?

The legacy LPS material specifically warned that mass notification might be delayed or might not deploy depending on incident dynamics, and that people still needed to take the appropriate protective actions they had learned. [P2] That concept is important: notification improves coordination, but individual survival should not depend on perfect technology.

Student cell phones: a capability, a complication and a reality

Whether a district restricts student phones for instructional reasons is a separate policy debate. During an emergency, however, schools should assume that many students and families will attempt to use them. Phones can receive official alerts, allow 911 calls or texts where supported, provide location and condition information, and help a student who has safely evaded communicate. They can also ring during shelter, distract from immediate protective action, spread incomplete information, transmit live images, create conflicting family instructions, drain batteries and draw parents toward an unsafe campus. The emergency plan needs an intentional phone strategy rather than pretending phones will disappear during a crisis.

The first minutes deserve special attention. Students who are sheltering should know when and how to silence devices. People should use 911 appropriately when they have direct information rather than assuming someone else has called, but the district should also teach that the phone is not a substitute for immediate movement away from obvious danger. Family messaging should specifically ask parents not to call repeatedly or self-deploy to the school, because both behaviors can complicate communication and the public-safety perimeter.

Commercial cellular networks can become congested when hundreds or thousands of students, families, media and responders attempt to communicate at once. CISA's Wireless Priority Service exists specifically to improve call completion for authorized national-security and emergency-preparedness users during congestion or degradation. That priority capability does not mean that every student or parent device receives priority. Schools should therefore maintain radio, PA/mass notification, wired/network and other redundant pathways rather than treating commercial cellular service as guaranteed capacity. [R43]

TECHNOLOGY TEST

Who sees it? Who understands it? Who acts on it? Who verifies that it worked? What happens when it does not?

Source / alignment notes: [R4] [R5] [P1] [P2]

PART IX

THE SCHOOL BUILDING IS PART OF THE RESPONSE

People need options. The environment has to make those options real.

Land mobile radio: school radio is not automatically public-safety radio

School districts use a wide variety of land-mobile-radio (LMR) systems. Depending on local history and licensing, school operations may use VHF, UHF or other business/public-safety spectrum, while law enforcement and fire/EMS may operate conventional or trunked systems, frequently using standards such as P25 and, in many jurisdictions, 700/800 MHz infrastructure. Some communities still maintain legacy low-band or other specialized systems. The important point is not the band name; it is that two radios being physically present does not mean they can communicate with one another.

The district should document which school roles need routine school-radio communication, which roles need an approved bridge or interoperability pathway to public safety, what talkgroups/channels are authorized, what happens during mutual aid, and who maintains radio templates and programming. CISA/SAFECOM guidance emphasizes standards-based P25 interoperability for public-safety LMR and plain language across agencies. [R25][R26]

Radio emergency buttons require their own testing. The receiving console or dispatcher must know which radio activated, whether the emergency indication follows the user across talkgroups, how cancellation works, whether an emergency call changes channel priority, and whether the feature behaves the same when a school radio interoperates through a gateway or shared public-safety system. CISA has specifically documented the complexity of emergency-alarm and emergency-call behavior across P25 interfaces. [R26]

In-building responder coverage: BDA, DAS and ERRCS

A school may have excellent outdoor public-safety radio coverage and still contain stairwells, mechanical rooms, additions, below-grade areas, gyms, hardened spaces or energy-efficient construction where responder radios perform poorly. Where required by adopted code or the AHJ, an in-building emergency responder communication enhancement system - often implemented with bidirectional amplifier (BDA) and distributed antenna system (DAS) architecture - may be necessary to support responder communications. NFPA 1225 and locally adopted fire/building codes govern these systems; requirements and terminology vary by jurisdiction. [R28]

These systems are not ordinary commercial cell boosters. They must be engineered for the local public-safety radio system and coordinated with the licensee/AHJ. Poorly designed or adjusted signal boosters can create harmful interference rather than improve communications. The FCC has long recognized both the public-safety value of boosters and the interference risk of technically deficient installations. [R29]

PRACTITIONER TEST

Do not ask only whether the school “has a BDA.” Ask whether the responding agencies can communicate from the actual rooms, stairwells, corridors, basements and exterior transition areas they will use; whether the system is supervised and backed by power; who receives a trouble signal; when it was last tested; and what the fallback is if it fails.

Cellular, public-safety broadband, private LTE/CBRS, Wi-Fi and proprietary RF

Commercial cellular service is valuable but can become congested during a major school emergency as students, families, media and responders all attempt to communicate. Public-safety broadband such as FirstNet is designed for the public-safety community and can support eligible school/public-safety support users under defined arrangements, but it does not replace local LMR voice planning. FirstNet itself describes LMR and LTE/broadband as complementary capabilities. [R30]

Some districts also evaluate private LTE/5G or CBRS networks, Wi-Fi-based life-safety devices, and proprietary radio-frequency systems for duress, location, sensors or communications. Each can be useful, but each creates a dependency. A Wi-Fi duress device depends on access-point coverage, roaming, controllers, switching, authentication and power. A private LTE device depends on its local radio/core architecture. A proprietary RF device depends on gateway health, coverage and battery supervision. A cellular app depends on the phone, carrier and user state. The district should know what continues to work when any one of those layers disappears.

Segmented networks, cybersecurity and safety continuity

Security and life-safety devices should not be placed on networks without deliberate architecture. Segmentation, least privilege, controlled vendor remote access, logging, patching and identity management can reduce cyber risk; however, segmentation alone does not create resilience. A perfectly segmented network that loses its single core switch, gateway, controller or upstream connection can still disable a life-safety capability. Network design should therefore pair cybersecurity with redundancy, monitored health, UPS/generator support, documented failover and a manual/degraded operating mode.

Use a PACE model for critical communications

CISA/NCSWIC promotes the Primary, Alternate, Contingency and Emergency (PACE) planning model for resilient communications. The model is useful for schools because it forces the team to decide, before an incident, what method replaces the normal method when it fails. The alternate methods must be familiar enough to use under stress and should be exercised rather than merely listed on paper. [R25]

PACE level	K-12 example question	What must be verified
Primary	What is the normal school emergency voice/data path?	Coverage, staffing, power, recipient readiness and daily operability.
Alternate	What is the planned backup if the primary path fails?	Users know how to switch; the alternate does not share the same single point of failure.
Contingency	What remains if both normal pathways are unavailable?	Manual/radio/runner/other locally approved method is trained and reachable.
Emergency	What last-resort method preserves the most critical message?	Simple, preplanned method that can still move life-safety information.

Emergency power and proof-of-life

“The school has a generator” is not a sufficient answer. The planning team should know which fire-alarm components, access-control panels, locks, network switches, wireless controllers, radios, BDA/DAS equipment, cameras, VMS servers, duress gateways, mass-notification systems, private cellular infrastructure and charging systems remain powered, for how long, and under what load. Some systems may have local batteries while others depend on UPS, generator or building power. Those differences matter when an incident lasts hours rather than minutes.

Proof-of-life should be operational and end-to-end. Record the last successful test, current trouble condition, responsible owner and retest evidence for each critical pathway. Include message origin and whether an automatic instruction can be superseded, received and understood. A safety system that quietly failed—or changed behavior after an update—should not be counted as a layer merely because it remains on an inventory list.

All-clear authentication

Ending or changing lockdown deserves the same rigor as starting it. Authentication applies to the decision, not merely the delivery channel. The district should define the human authority and succession, how public safety and school command coordinate, the exact message elements, and what occupants do if automatic, stale or conflicting messages appear. A district text, voice outside a door, social post or rumor is not sufficient solely because it seems official. If physical release by law enforcement is the local method, that expectation should be explicit and exercised.

COMMUNICATIONS / INSTITUTIONAL RESPONSIBILITY

Adequate emergency notification capability

The standard is fit for purpose and validated in the real school environment - not a product category or one application.

CAPABILITY TO EXAMINE	WHAT "ADEQUATE" REQUIRES LOCAL TEAMS TO VERIFY
Simple, safe initiation	Authorized users can initiate the fitting warning without unnecessary exposure, complicated sequences, or a single individual dependency.
Correct alert meaning	Assistance, medical and immediate violent-threat signals have distinct operational meanings, recipients and escalation.
Complete population coverage	Classrooms, corridors, restrooms, gyms, outdoors, portables, buses, visitors, contractors and after-hours groups are included.
Useful message content	Plain, actionable language identifies the needed action and known location/affected zone when feasible; updates can supersede stale messages.
Accessibility and languages	People can receive, perceive and understand messages across relevant hearing, vision, cognitive, communication and language needs.
Monitoring and supervision	Known owner receives device/network failure, lost device, battery, gateway and path-health indications and closes corrective action.
Independent fallback	Alternate methods do not share one hidden single point of failure; PACE alternatives are exercised with senders and receivers.
Human command / public safety	Initiation authority, receipt, acknowledgement, dispatch interface, corrective message, cancellation, record and accountability are defined.

THE ESSENTIAL DISTINCTION

An activated duress device, a sent message and a delivered notification are **not the same as effective protective action**. Verify the chain through the recipient and the action that follows.

Source / method: Chs. 13, 15–16, OP04-OP09 and Appendix N; [S1] federal K-12 communication guidance; [S4] CISA layered approach.

VERIFICATION / EXERCISE WORKSHEET

Prove the warning reaches people

Adult-led, controlled exercise. No simulated gunfire, unannounced frightening scenarios or live emergency dispatch. Coordinate with authorized agencies and system owners.

Illustrative prompt

A staff member recognizes immediate danger near an exterior entrance and activates a locally approved warning **when safe**. The location is then updated, and the primary communication path becomes unavailable. Test the expected handoffs without placing anyone at risk.

FUNCTION / PLACE	OBSERVED RESULT / OWNER / FOLLOW-UP
First observer: ability to protect without delaying to report	_____
Approved warning initiated / meaning / location	_____
Administration / staffed monitoring recipient / acknowledgement	_____
Distant classroom / substitute teacher	_____
Restroom / corridor / gym users	_____
Exterior field / athletic staff	_____
Bus dispatcher / approaching driver	_____
Accessible, language and after-hours recipients	_____
Update or supersession reaches same people	_____
Fallback when primary path is disabled	_____
Safe movement / status / accountability	_____

Record what proves completion

For each handoff, note the initiating condition, actual message path, who received/understood it, observed protective behavior, failure, interim measure, owner, due date and retest. Where reliable timestamps exist, retain them; do not invent universal performance thresholds or imply one timed drill predicts outcomes.

THE RIGHT MEASURE

Did the recipient receive actionable information and have a reasonable protective option - not merely "the dashboard says delivered"?

Source / method: Appendices K, N, O, P, R and S; [S5] national guidance on trauma-informed exercises. Test controls and local approval required.

CHAPTER 14 | Openings and Physical Protection

People cannot shelter behind a door that does not latch, leave by a blocked exit or rely on emergency access that responders cannot use. Physical security is not separate from protective options. Openings, egress, accessible routes, keys and credentials must actually support the human action a school expects; otherwise a written protective choice is not a real capability.

Opening conditions to verify

- exterior doors close and latch reliably and are not routinely defeated or propped;
- classroom/occupied-space doors provide code-compliant interior locking appropriate to local policy and adopted code;
- occupants can leave without keys, special tools or unusual knowledge;
- staff and developmentally capable students understand normal door operation;
- door position and access-control information, where used, is monitored and acted upon;
- glazing, sidelights and hardware are evaluated as complete openings rather than isolated products;
- fire doors and closers are maintained and not compromised by security modifications;
- responders have approved methods to enter secured rooms and critical areas;
- work orders for door/lock failures are prioritized as life-safety issues, not routine convenience items.

The Arapahoe post-incident review describes the aggressor entering through an unsecured entrance and separately highlights the value of staff/student protective action. [R11] The lesson is not that training can compensate for an unsecured opening. The stronger lesson is that prevention, physical protection and human capability must reinforce one another.

FOUNDATIONAL TEST

Options only exist if the environment supports them.

Source / alignment notes: [R9] [R11] [R10]

Access control during lockdown: know the commanded state and the physical state

Electronic access control can support lockdown by changing authorized entry, restricting selected exterior access, presenting door status and giving trained operators a faster picture of the perimeter. It can also create dangerous assumptions if staff believe a remote command physically secured a door that was propped open, failed to latch, had a damaged closer, was held by a person, or was configured differently from the expected software state. The commanded state and the physical state are not the same thing.

Door-position monitoring is therefore a valuable complement to access control, but a door-contact alarm is only information. Someone must know which doors matter, what an exception means during a crisis, whether the system can distinguish normal egress from a propped opening, who sees the event, and what response is reasonable without sending a person toward danger. Mechanical function, latching, code-compliant free egress, keys/credentials and responder override remain foundational even in highly automated buildings.

Student door knowledge belongs inside the layered system

The earlier student-door chapter is intentionally reinforced here because technology can unintentionally make basic protective knowledge seem like an adult-only function. A developmentally capable student should understand how the ordinary door in the room they occupy closes and locks, how to recognize that it is secured, and that securing a nearby room may be an appropriate life-safety action when danger is apparent and no adult is immediately available. The student should never be assigned to patrol doors, search for people or leave safety to perform a security task.

ARCHITECTURE / GROUNDS / PREVENTION

The School Environment Is Part of the Protective Capability

Architecture and landscape are not passive backgrounds. They affect how people see, move, gather, seek protection and assist one another.

Stand in the middle of a school campus during dismissal. Students are crossing courtyards; families and buses share access roads; the custodial team is working outside; a coach supervises a field beyond the reach of an interior announcement. Look toward the entrances, paths, plantings, walls, windows and gathering spaces. Every one of these features shapes how people use the school.

This is one reason Crime Prevention Through Environmental Design (CPTED) belongs in a comprehensive school-safety discussion. CPTED examines how the design and management of physical and social environments may discourage harmful behavior, support positive use and reinforce safety. Common principles include natural surveillance, natural access control, territorial reinforcement, and management and maintenance. More recent approaches also consider social cohesion, connection and community culture. These are complementary lenses, not formulas that replace school climate or behavioral intervention. [U2]

Visibility has value—and limits

Lighting, windows, paths, landscaping and the arrangement of occupied spaces can help people see and be seen. A well-maintained campus can make the intended uses of its spaces understandable. But visibility alone is not security. A feature that improves casual supervision at noon may create glare or blind areas at night; a beautiful planting that grows without maintenance can alter lines of sight and access. The design question is contextual: what conditions does the feature support, and for whom?

Access and circulation matter across the entire school day. An entrance planned for a normal class period may behave differently when athletic events, deliveries, visiting teams or late buses overlap. A corridor or gate may work well for ordinary movement but become congested when people seek different protective options. Schools should ask what their environments communicate through everyday use, and how that use changes when conditions do.

> **A feature is not protective merely because it appears on a site plan. Its contribution depends on how people encounter it, maintain it and use it under actual conditions.**

Cover, concealment and realistic expectations

In emergency discussions, concealment usually means reducing visibility of a person or movement; cover means a physical feature that can provide some degree of protection against a specified hazard. They are not interchangeable. Landscaping, a partition, a parked vehicle, or a wall may block someone's view without providing dependable protection from gunfire or another hazard. Materials, geometry and the hazard itself matter. A school should not describe an object as ballistic protection without appropriate evidence.

This distinction is valuable for age-appropriate conversations about moving away from immediate danger, finding a safer location and avoiding an assumption that something visually hidden is necessarily protective. The purpose is environmental understanding, not tactical training or a promise that a given feature will protect everyone.

A welcoming environment and a prepared environment can be the same place

School grounds should remain places of learning, belonging, accessibility, recreation and community life. CPTED is not simply adding fences, restricting movement or making schools resemble fortified facilities. Its strongest use can integrate clear circulation, well-maintained spaces, supportive supervision, usable signs, accessible routes and human relationships—without creating unnecessary fear.

When considering changes, the district should include architects, facilities professionals, educators, students and families when appropriate, fire and building officials, public safety, accessibility experts and people responsible for maintaining the space after construction. The best security concept on a drawing can fail if it blocks lawful egress, confuses families, excludes a student using a mobility device, or requires staffing that will not be available.

CAMPUS MOVEMENT / CHANGING CONDITIONS

More Than One Reasonable Direction

Protective movement and accountability should reflect where danger is—not require everyone to travel toward one predetermined place.

During my district leadership, I considered multiple potential rally or accountability locations in different directions around buildings. The idea was straightforward: a single destination or required direction could become unsafe depending on the location of danger. Those alternatives were a local planning approach, not a universal method I would prescribe to every school.

The larger lesson is to avoid assuming that the safest movement for every person is identical. A class in a secured room, students on a field, a visitor near an exterior gate and a group already beyond the campus perimeter may have very different options. An interior emergency may make remaining outdoors safer; an exterior danger may make a familiar entrance unsafe to approach. Fire, weather, traffic and accessibility can change those judgments again.

Multiple potential destinations are not an invitation to scatter people without a plan. The district still needs ways to communicate, provide assistance and account for everyone. Locations should be evaluated for the hazards, public-safety perimeter, route conditions, accessibility, transportation and the ability to connect into a reunification process. A point that was suitable during planning may become unsuitable during the actual event.

> **A destination is an option, not an obligation to move toward danger. People who have reached safety should not be required to return toward a hazard merely to satisfy an expected head count.**

From the site plan to the person standing there

A multidisciplinary team can walk exterior areas and ask what students and staff would see from each real location; whether they could understand a warning; how different routes change under different hazards; where they can obtain reasonable protection; and how the institution would learn where they moved. The discussion should include parking areas, bus loops, athletic and performance spaces, portables, connecting routes and after-hours programs.

CPTED and exterior protective actions intersect, but they are not the same discipline. One evaluates how places influence ordinary prevention and safety; the other examines decisions when a hazard already exists. Reviewing them together helps expose conflicts between design assumptions and actual protective options.

This is a way to invite thought, not create a rigid national map of rally points. Any actual sites, routes or sensitive operational arrangements belong in locally controlled documents developed with school leadership, facilities, public safety and accessibility partners.

This is also a design test. If a code-compliant classroom lock is so complicated that regular occupants cannot operate it under stress, the system has created a human-factors problem. The goal is simple operation from the protected side, free egress, visible or otherwise understandable lock status where appropriate, and routine maintenance that keeps the opening dependable.

THE LAYERS THAT MAKE LOCKDOWN REAL

A protective action becomes dependable only when the organization and its systems support the people expected to use it.

CHAPTER 15 | The Layers That Make Lockdown Real

A lockdown is often pictured as a classroom procedure: close, lock, get out of sight and wait. But a district-wide protective action relies on far more. Governance, people, openings, detection, duress, communications, networks, transportation, command and care must support the same purpose. The measure is not how many systems a district has purchased; it is whether the people and systems work together, including when one handoff fails.

The purpose of layering is not to purchase the greatest number of systems. It is to create multiple, mutually reinforcing ways to recognize danger, communicate, deny or slow access, protect occupants, verify changing conditions, bring responders to the right place, sustain operations when a component fails, account for people and begin care. This chapter uses the Unified Life Safety System idea in a practical way: each layer is judged by what it contributes to the protective action and how it interacts with the others.

Layer	Contribution to lockdown/readiness	Common failure
District governance / policy	Defines authority, acceptable actions, decision rights, accountability and sustainment.	Policy is written but not understood; authority is centralized so tightly that first-minute action is delayed.
Human roles / training	Turns policy into recognition, judgment and action by students, staff and specialized roles.	People wait for perfect information or assume another role owns the problem.
Openings / access control	Provides secure rooms, perimeter control, door status, free egress and responder access.	Remote “lock” command is assumed to equal a physically latched/secured opening.
Duress / panic	Creates a human-originated request for immediate help and, in some designs, protective action.	Button location/meaning/recipient/acknowledgement/failure path is unclear.

Layer	Contribution to lockdown/readiness	Common failure
Alarms / detection	Creates sensor-originated information about fire, intrusion, gunfire, weapons or other conditions.	Detection is mistaken for verified threat context or automatic response is unsafe.
Video / VMS / monitoring	Supports verification, location, movement tracking and evidence.	No trained viewer, poor camera naming, latency, blind spots, or stale maps.
Communications / radio / networks	Moves information among occupants, school command, dispatch and responders.	Single network dependency, poor coverage, incompatible radios or congestion.
Mass notification	Communicates protective action, updates and all-clear to the affected population.	Message is vague, inaudible, inaccessible, untranslated or conflicts with another alarm.
Incident command / public safety	Converts information into coordinated priorities, resource decisions and field action.	Technology creates parallel command paths or agencies receive different information.
Transportation	Protects mobile students and provides evacuation/diversion capability.	Fleet count is mistaken for immediate driver/vehicle capacity; inbound buses enter hazard.
Medical / care / reunification	Provides immediate lifesaving care, accountability, family assistance and recovery.	Care starts too late or distributed evacuees cannot be accounted for.

Maintenance / proof-of-life	Keeps the capability real after turnover, construction, updates and aging.	Installed equipment becomes assumed capability despite outages or configuration drift.

LAYERING PRINCIPLE

A layer is not real because it was purchased. It is real when the district knows what it is supposed to do, who owns it, how it interacts with other systems, how it fails, how people use it, how it is tested, and what happens when it is unavailable.

District policy, procedure and human roles

The first layer is governance because every technical layer eventually asks a human-authority question. Who can initiate, modify and end each protective action? What may automation do without a human? Who owns each integration and change? Who may deliberately launch a pre-scripted message? Who takes over if the expected leader is unavailable? Who can silence competing notification? These answers must be written, practiced by role and retested after personnel, software, hardware, vendor or policy changes.

Authority should be distributed enough to preserve first-minute life safety while command remains structured enough to prevent contradictory action. That balance is not a contradiction. The custodian, teacher, coach, bus driver or student closest to danger may have the best immediate information; district and public-safety command then develop the wider operating picture. The plan should allow local protective action without turning every individual into an incident commander.

Duress and panic systems: a major life-safety layer

Duress has become one of the most important growth areas in K-12 safety because it gives an occupant a way to request help before a central office has independently verified an event. The technology family is broad, however, and the word “panic button” can hide very different architectures. The district should evaluate duress as a complete path from human activation to location, delivery, acknowledgement, public-safety contact, protective action, cancellation and proof-of-life.

The following categories are a practitioner functional taxonomy rather than a vendor ranking. Many products combine more than one category.

Duress type	Description	Potential strengths	Limitations / questions
Fixed hardwired	Dedicated physical activation point with wired alarm path.	Stable location; can be supervised; simple user action.	User must reach the device; wiring/panel dependency; location must remain accurately mapped.

Duress type	Description	Potential strengths	Limitations / questions
Fixed wireless RF	Physical button using dedicated or proprietary wireless path.	Flexible placement; can avoid new cabling.	RF coverage, batteries, gateways, interference and supervision must be proven.
Wearable RF / RTLS-capable	Mobile badge/button, sometimes with location services.	Activation travels with staff; may provide room/zone location.	Battery/device assignment, location accuracy, coverage, lost devices, charging and false activation.
Wi-Fi-based	Button/app/device uses school Wi-Fi and network.	Can leverage existing infrastructure and location data.	Inherits AP coverage, roaming, controller, switch, authentication, network and power dependencies.
Cellular / smartphone app	Phone-based duress using commercial/public-safety cellular.	Broad reach; can add GPS, voice, images or text.	Phone may be absent/locked/unpowered; cellular congestion, indoor coverage and app state matter.
Radio emergency feature	Emergency button on LMR portable/mobile radio.	Immediate to trained dispatch/radio users; voice can follow.	Console programming, talkgroup behavior, identity/location, cancellation and interoperability must be understood.
Bus duress	Driver button/radio feature tied to bus ID, GPS and dispatch.	Supports silent request from mobile school environment.	Vehicle data path, dead zones, dispatcher staffing, GPS age and 911 escalation must be tested.
Multi-path / hybrid	Combines two or more communication paths or gateways.	Can reduce dependence on one network.	Complexity, duplicate alerts, correlation, maintenance and inconsistent failure behavior can increase.

A district should make a deliberate decision about what a duress activation does. In some environments, a life-safety duress device is intended to initiate immediate school protective action and public-safety notification. In others, it first alerts security or administration for rapid verification. Neither model should exist by accident. The consequence of false activation, the cost of delay, the reliability of location, the expected threat type and local public-safety workflow should drive the decision.

Duress as the human detection layer

One reason duress deserves special emphasis is that it can convert human recognition into system action before another sensor or central office independently discovers the event. A camera analytic waits for a visible condition. A gunshot detector waits for a discharge. A person may already know that a violent assault, medical emergency, threatening behavior or other urgent condition is occurring. A well-designed duress pathway gives that person a simple way to move the information into the district and public-safety response chain.

The district should also define what kind of duress it is deploying. An assistance or staff-help button used for escalating behavior is not necessarily the same event as a violent-threat/active-assailant duress activation. Medical duress may need EMS and school-health response rather than lockdown. A hold-up or silent alarm may intentionally avoid local audible indication. Combining these purposes under one undefined “panic button” can produce ambiguity at the very moment clarity is needed.

Integration should be designed as a closed-loop operational sequence: detection or human activation -> reliable identity/location -> receipt -> acknowledgement -> correlation/verification as appropriate -> human decision or explicitly approved automatic threshold -> protective message/action -> delivery confirmation -> incident command -> update/cancellation -> accountability -> record preservation -> after-action correction -> retest. Every arrow is a handoff that can fail.

The best duress architecture is therefore not simply the fastest button. It is the system whose strengths and limitations match the school's mission, whose location performance is validated in the actual building and buses, whose users receive acknowledgement where appropriate, whose public-safety workflow is agreed locally, whose failures are supervised, and whose complete chain is tested often enough that the district knows it still works.

DURESS TEST

Can the district explain, in one page, who may activate duress, what each activation means, who receives it, what location is displayed, whether the user receives acknowledgement, when 911/ECC is contacted, whether lockdown or another protective action starts, who can cancel it, what happens after hours, and what happens if the primary communication path fails?

Video management, live monitoring and verification

Video is most useful during lockdown when it answers operational questions: where is the threat, where was it last seen, which route is clear, which door is open, where are people moving, is there visible fire or smoke, and what information can be safely shared with responders? A video management system (VMS) should therefore be treated as a live information layer, not merely an evidence archive. The system needs accurate camera names, current maps, synchronized time, trained users, permissions, health monitoring and a plan for who watches during an emergency.

Managed monitoring can add capability, but "24/7 monitoring" must be defined. Software may continuously analyze feeds while a person reviews only candidate events; a district security center may monitor alarms but not every camera; a third-party center may verify a specific analytic and then call designated recipients. Those models have different latency, staffing, privacy, record and failure implications. My separate practitioner review with Michael Dorn emphasizes that machine output, human verification and response are separate layers that should be measured separately. [P4]

Pulling nearby camera feeds automatically or through a well-rehearsed workflow can reduce search time. During a fire alarm/lockdown collision, for example, the operator may want the initiating device, adjacent corridor, stairwell, floor and exterior approaches immediately. During a weapons alert, the operator may need the triggering camera plus nearby views to determine direction of movement. The design objective is a common operating picture, not a wall of video without prioritization.

Weapons detection and gunshot detection as protective-action triggers

Visual firearm analytics, physical weapons screening and gunshot detection solve different problems. Visual analytics can potentially identify a visible firearm before the first shot if the weapon is in a usable camera view. Gunshot detection generally begins after a discharge and can add rapid confirmation and location. Physical screening addresses controlled pathways before entry. None detects every threat, and no technology should be represented as a substitute for doors, supervision, reporting, behavioral threat assessment, communications or trained human response. [P4]

For lockdown planning, the essential question is what level of detection is sufficient to trigger what action. A machine candidate is not the same as a human-verified firearm image; a verified firearm image is not automatically the same as a person actively attacking; a gunshot sensor may confirm firearm discharge without identifying the shooter. At the same time, the person who directly hears unmistakable gunfire or observes an attack should not be required to wait for a sensor or monitoring center. Technology should accelerate and corroborate recognition, not become a prerequisite for self-protection.

Information state	What it supports	Lockdown/protective-action implication
Machine/sensor candidate	Immediate review; preserve time/location.	Usually insufficient by itself for an irreversible automated action unless the district has intentionally accepted that design and tested false-alert consequences.

Information state	What it supports	Lockdown/protective-action implication
Human-verified visible firearm / sensor-confirmed gunshot	Rapid escalation, 911/ECC notification, camera/map cueing.	May meet district-defined threshold for immediate protective action depending on local policy, location and context.
Context-confirmed violent threat	Known unauthorized armed/violent activity or direct human observation.	Initiate appropriate protective action without waiting for additional technology confirmation.
Direct occupant recognition	Gunfire heard, attacker observed, violence immediately apparent.	People closest to danger act first; notification and technology should catch up to the human timeline.

False or misunderstood alerts also belong in the lockdown plan. A false firearm detection can still produce an armed police response, student detention, lockdown, family anxiety and loss of trust. The district should measure false alerts, missed detections, verification time, notification time, protective-action time, cancellation performance and after-action corrective closure. [P4]

Mass notification: plain language, location, repetition and language access

Mass notification should tell people what they need to do, not merely announce that something is wrong. CISA and U.S. Department of Education guidance emphasize plain/familiar language and coordinated messages. Current federal school-safety resources also specifically call for accommodations for language barriers, hearing/vision needs and other access and functional needs. [R31][R32]

A useful initial message is short, plain and action-oriented. A change message must also disclose enough context to distinguish a deliberate human decision from an automatic alarm sequence—for example: 'AUTHORIZED UPDATE: LOCKDOWN REMAINS IN EFFECT. THE FIRE ALARM IS BEING EVALUATED. MOVE ONLY IF FIRE, SMOKE OR ANOTHER IMMEDIATE CONDITION MAKES YOUR LOCATION UNSAFE.' If command changes the action, the message should name the affected population/location and route or destination when known. Core messages should be pre-scripted in needed languages and accessible modes without delaying the first urgent direction.

MESSAGE DESIGN PRINCIPLE

The first message should move people toward a protective action. The second message should improve the operating picture. Every message should use familiar words, identify the affected location when known, avoid codes that outsiders or substitutes may not understand, and remain consistent with public-safety direction.

Example concept - not a mandated script: “LOCKDOWN. VIOLENT THREAT REPORTED IN THE NORTH PARKING AREA. REMAIN IN OR MOVE TO A SECURE LOCATION AWAY FROM THAT AREA. PEOPLE OUTSIDE SHOULD MOVE AWAY FROM THE NORTH PARKING AREA AND FOLLOW TRAINED EXTERIOR SAFETY PROCEDURES.” The precise wording, automation, translation and zoning should be locally approved and exercised.

Exterior and reentry messaging

Mass notification must reach the people who are not inside a classroom. Exterior speakers, stadium/field systems, bus-loop coverage, mobile alerts, radios and staff voice direction may all be part of that architecture. During an exterior threat, the most important message may be the opposite of normal reentry: do not enter the building; move away from the affected area; go to the trained safer location. The district should test whether people can actually hear and understand those instructions at playgrounds, parking lots, athletic fields, portables and arrival/dismissal areas.

In my LPS work, exterior lockdown messages were intentionally loud, repeated and written to tell people outside not to enter the building and to leave the area toward safety. The exact wording and hardware are not

the lesson. The lesson is that a schoolwide alert that cannot be understood by people outside is not truly schoolwide, and that repeating a clear protective message can help late-arriving students, visitors, buses and staff who did not hear the first activation.

Incident Command: technology must feed command, not compete with it

FEMA school emergency-planning guidance uses ICS because schools, districts and responders need a common way to organize command, operations, planning, logistics, communications and public information. [R4][R5] The school may initiate protective action before responders arrive; as the response grows, district command must connect with law enforcement, fire/EMS, emergency management and the ECC/PSAP. Unified Command or other locally appropriate multiagency coordination becomes especially important when violent-threat, fire, medical, transportation and reunification missions occur at the same time.

A camera platform, duress vendor, access-control workstation, fire panel or notification service does not become command because it can automate actions. Technology should deliver information into the adopted decision structure. Command must know whether a message was automatic or deliberately initiated, acknowledge receipt, reconcile competing hazards, issue a clear action, confirm delivery where practical, update/cancel prior messages and preserve the event record.

Complex incidents may also benefit from a formal Communications Unit or comparable function under ICS. CISA describes the Communications Unit as responsible for voice/data networks, frequency/talkgroup planning, communications equipment and incident communications planning. [R27] A large district should know in advance how school radio, public-safety LMR, broadband, interoperable gateways and vendor data feeds will be managed during a prolonged incident.

Continuity of command when the school ICS is disrupted

A district should assume that the school-level command structure may be partially or completely unavailable in the very event for which it was designed. The principal may be sheltering with students, injured, evacuated, isolated from communications or unable to reach the designated command post. Multiple administrators may be affected at once. The building itself may no longer be a usable command location.

The EOP should therefore establish succession and continuity of command at both school and district levels. It should identify alternate site leadership, a district EOC/security-operations or other command-and-control capability, alternate physical/virtual command locations, delegated authorities, redundant communications, and a liaison path into law-enforcement/fire/EMS Unified Command. District functions such as transportation, public information, family assistance, reunification, facilities, IT, food/logistics, student services and records should be able to continue even when the impacted school cannot perform them.

ICS is not a wall chart. It is continuity of command, coordination and resource management when the expected leader, location or communication path is no longer available.

Fire department, EMS and medical response when fire alarm and violence coexist

The fire-alarm problem extends beyond the people inside the school. An automatic fire-alarm transmission can dispatch fire apparatus before the ECC/PSAP has correlated the call with 911 reports of gunfire. If the incident record is not merged quickly, firefighters and EMS can arrive thinking they are responding to a routine alarm while law enforcement is responding to an armed threat. The dispatch plan should ensure that violent-threat information reaches fire/EMS units before they unknowingly enter an unsafe area.

The response may then require several missions at once: law enforcement locating and stopping the threat; fire personnel evaluating alarm/fire conditions and suppression needs; EMS organizing triage, treatment and transport; school/district staff providing maps, keys/credentials, student information and building-system

knowledge; and command establishing staging, casualty movement and reunification. The specific use of rescue task force, warm-zone medical operations or other integrated models is a local public-safety decision and should be trained jointly rather than improvised during the incident.

Medical response also begins before responders reach every victim. Staff or students who are safe enough to act may be able to call 911, apply pressure, use a bleeding-control kit, retrieve an AED when doing so does not require moving toward danger, reassure injured people, or report victim locations. The EOP should identify where first-aid, AED and bleeding-control resources are located and whether those resources remain reachable during lockdown. “Care” should never require someone to abandon a reasonably safe position and move into an active threat.

DISPATCH / FIRE / EMS TEST

If the ECC receives an automatic school fire alarm and, seconds later, a report of shots fired or school duress activation, will those events be correlated? Will fire and EMS know that a violent threat is possible before arrival? Where will they stage? Who communicates verified fire conditions? How does Unified Command decide when and where medical teams can move?

Internal and external stakeholder coordination

Lockdown crosses organizational boundaries. Internally, security/emergency management, school administration, teachers, substitutes, facilities, IT/cybersecurity, communications/PIO, transportation, nursing, special education/accessibility, mental health, food service, athletics, custodial services, HR, legal, procurement and executive leadership own parts of the operating picture. Externally, law enforcement, SRO agency, fire/EMS, emergency management, ECC/PSAP/911, fire marshal/AHJ, utilities, hospitals, neighboring jurisdictions, mutual aid, alarm supervising/monitoring stations, integrators, notification and software vendors, insurers/risk pools, parents and community partners may all be involved. Each needs the portion of training, contact information and exercise participation required by its role.

The practical test is ownership. If a camera is down, who owns repair? If a duress badge fails to locate, who owns correction? If a fire alarm message masks lockdown audio, who owns the interface? If the bus fleet needs 30 drivers at noon, who can produce them? If a translated parent message is needed, who has authority and resources to send it? If the gunshot vendor calls the wrong 911 center, who fixes the workflow? Interoperability becomes real when those answers are assigned before the incident.

Metrics and proof-of-life for the layered system

A mature district measures more than whether a drill occurred. Useful measures include time from recognition/activation to notification and 911/ECC receipt; time to a deliberate human update when an alarm collision occurs; message origin and supersession; delivery, reach, intelligibility and comprehension; acknowledgement; door/system performance; radio coverage; accessibility/language delivery; distributed accountability; stakeholder coordination; corrective-action closure and retest. Measures should improve the system, not rank individuals who acted under stress.

The core question remains the same across every technology: does the component still do what people believe it will do in the first minute, and does the handoff to the next layer work? Verification beats assumption.

TECHNOLOGY AND HUMAN CAPABILITY

From Installed Technology to Verified Protective Capability

School safety technology can be extraordinarily valuable. Its protective value depends on people understanding, using, maintaining and verifying what the system actually does.

A school may have cameras, electronic access control, duress devices, radios and notification systems that all work during an acceptance test. Yet during an emergency, a crucial question may remain unanswered: **Who sees the event, who understands it, what action follows, and what happens when a component fails?**

A purchased feature is not automatically a sustained life-safety capability. Consider the gap between a remotely commanded lock and a physically latched door; between a received duress alert and an actual response; or between a transmitted warning and an outdoor group that can hear, understand and act upon it.

Six stages of practical capability

STAGE	QUESTION THE DISTRICT SHOULD BE ABLE TO ANSWER
Installed	What was installed, approved and commissioned? What operating limits were identified?
Understood	Which people need to know what the system does, how to use it and what it cannot do?
Operational	Who operates or receives it during class, transitions, evenings, weekends and emergencies?
Integrated	What happens before and after this system acts? Which human and technical handoffs matter?
Verified	What end-to-end evidence shows protection works under normal and degraded conditions?
Sustained	Who maintains, monitors, funds, updates, corrects and periodically retests the capability?

THE CENTRAL DISTINCTION

Installed is not the same as understood. Connected is not the same as coordinated. Activated is not the same as protected. Each stage requires people, procedures and evidence.

KNOW THE ACTUAL BEHAVIOR

What Must People Know—and Who Needs to Know It?

Not everyone needs to become a technical expert. Each person does need enough understanding to use the protective features relevant to their role.

CAPABILITY	PRACTICAL UNDERSTANDING AND VERIFICATION
Doors and access control	Teachers and students know normal opening operation and free egress. Facilities verify latch/lock function; command distinguishes a software lock command from an actually secured opening.
Duress and panic	Users distinguish immediate violent-threat activation from assistance or medical requests. Monitoring staff know identity, location, receipt, acknowledgement, escalation and cancellation; faults are supervised.

Video and detection	Authorized personnel know what is monitored, what an alert means, how images are retrieved and the limits of automated detection. A signal is not a complete threat assessment or response.
PA and mass notification	Authorized initiators understand messages, audience, location and priority. Teams test intelligibility in classrooms, gyms, restrooms, exteriors and after-hours spaces, including accessible modes.
Radios and responder coverage	Users know approved channels, battery and emergency features. Communications owners verify coverage and coordination with public safety and any applicable enhancement systems.
Fire and building systems	Appropriate staff know the documented alarm sequence, door and elevator behavior, HVAC effects, permitted controls, monitoring and safe degraded operations.
Networks, power and cyber	IT and safety leaders identify shared dependencies, backup duration, fault indications, controlled vendor access and who authorizes alternative operations during disruption.

HUMAN-USE QUESTION

If the person normally responsible is absent, does a substitute or alternate know the essential action? Can the user recognize a failure and rely on an established safe alternative?

FROM WARNING TO PROTECTIVE ACTION

Test the Entire Chain—Without Creating a Crisis

A successful component check is useful. A successful protective function requires the handoffs between components and people to work as expected.

Trace a representative, controlled scenario

HANDOFF	WHAT TO VERIFY
Human recognition	The witness can protect themselves first. Warning or duress activation occurs only when safe; no person is made a single point of failure.
Activation and meaning	Which function was activated? Does it mean assistance, medical help, or an immediate violent threat? Is its location usable?
Receipt and interpretation	Who receives and acknowledges the alert, including when the primary receiving person or site is unavailable?
Action and distribution	Who initiates the locally approved protective action? Do people inside, outside and approaching campus receive an actionable, accessible message?
Building and public safety	What doors, PA, radio, dispatch and responder information are involved? Which automatic functions are distinct from authorized human decisions?
Failure and change	What happens if the network, power, device or leader fails, or the threat changes location? Can command update and cancel outdated instructions?
Evidence and retest	What did people actually receive, understand and do? Who owns each gap, interim protection, correction and witnessed retest?

EXERCISE SAFETY

Use pre-coordinated test modes, role-based discussion and controlled device checks. Prevent unintended live 911 dispatch, hazardous door releases, confusing announcements or high-intensity student simulations.

The aim is not to make a dramatic exercise. It is to prove that people and systems can connect information to reasonable protective decisions under the school's actual conditions. Include the person who first detects danger as well as those receiving a delayed, incomplete or inaccessible warning.

GOVERNANCE AND CONTINUOUS IMPROVEMENT

Use What You Have—and Keep It Dependable

The next safety improvement may be better training, staffing, supervision, maintenance, configuration or integration rather than another purchase.

A practical existing-capability review

REVIEW ITEM	OUTPUT TO RECORD
Inventory and purpose	System name, actual protective purpose, responsible department, normal users and known limitations.
Ownership and coverage	Primary/alternate system owner, staffed receiver, hours of operation, areas/populations reached and authorized users.
Integration and dependencies	Which decisions, messages, cameras, doors, networks, providers or dispatch partners are connected—and which are not?
Health, maintenance and training	How failures are detected, who receives fault signals, repair priority, scheduled tests and evidence of user understanding.
Verified result	Observed capability, gap or mismatch, interim protective arrangement, correction owner, due date and retest evidence.

One ordinary school-day scenario

A renovation changes door hardware and adds network equipment. Weeks later, a wireless device in a distant activity space stops checking in reliably. Staff still see the device listed in an inventory. A planned capability review should reveal the fault before an emergency, assign technical and operational owners, establish an approved interim measure and verify the repaired pathway end to end.

A simple starting sequence

First month: Select one protective function, gather school, facilities, IT, safety and public-safety partners, and document the real response chain. **Next:** Verify normal use and a safe failure scenario. **Then:** Close the observed gaps and establish a practical change-triggered retest schedule. This is an improvement method, not a new mandated audit or technology score.

A QUESTION TO CARRY BACK

If the emergency happened tomorrow, would the people who depend on our technology know what it does, how to use it, who acts on its information, and what to do when it is unavailable?

DURESS / NOTIFICATION / SCHOOL PRACTICE

Alyssa's Law and the capability behind the alert

Consider a teacher who recognizes an immediate violent threat. The teacher may need to secure a space or move to safety before touching a device. If it is safe, a fixed or wearable duress control may carry an urgent signal to people far beyond that room. But the question is not simply whether a button was pressed. It is what the system and institution do with that information—and whether other people become protected sooner.

The tragedy that gave Alyssa's Law its name led to efforts across the United States to strengthen rapid school emergency alerts. State laws and related legislative measures vary in who is covered, the type of alerting required, public-safety connection, funding, timing and implementation responsibilities. A proposal, an authorization, a grant program and a mandatory requirement are not interchangeable. A school must identify the enacted text and current agency guidance applicable to its jurisdiction.

The absence of a state mandate does not erase the need to examine duress. My practitioner recommendation is that every district consider fit-for-purpose, reliably supported ways for staff to request urgent assistance and initiate an appropriate response, whether or not Alyssa's Law applies there.

A baseline before a statutory requirement

The Partner Alliance for Safer Schools (PASS), in its Seventh Edition (2025), places panic-alarm capability in the Tier 1 recommendations for both school buildings and classrooms. Its guidance addresses activation, receipt, public-safety coordination, physical locations, and the distinction between technologies that may be wired, wireless or otherwise configured. Related guidance considers training, redundancy, campus coverage and supervision. A tiered professional recommendation is not itself a law or a guarantee of performance.

I consider the PASS approach significant not because it selects a product, but because it treats an opportunity to communicate urgent danger as a foundational protective capability. Yet merely meeting an equipment list would be an incomplete reading of that intent. Schools need to understand what each activation means, how warnings reach the people affected, and what happens when technology or normal staffing is unavailable.

The contribution of Make Our Schools Safe

Make Our Schools Safe (MOSS) has advocated for Alyssa's Law and developed detailed educational guidance on implementing panic alert systems. Its Alyssa's Law Solution Guide, published February 6, 2026, addresses rapid activation, technical reliability, accessible use, training, interoperability, ongoing monitoring, auditability, false alarms, cybersecurity and sustainable operation. These are MOSS recommendations; they should not be mistaken for universal statutory requirements or for endorsement of this independent publication.

A particularly useful contribution is the idea that duress cannot be evaluated by one department acting alone. School leadership, facilities, IT, educators, accessibility professionals, public-safety communications and responders may each see a different part of the same risk. Working together, they can examine how a device connects to human needs, actual campus geometry, agency response and continuity when systems fail.

An alert is information; protection requires the full chain

A school may issue a signal that reaches a dispatch center but does not reach the coach on an athletic field. Another system may warn all classrooms but fail to identify a useful location to public safety. A wearable may work in a corridor but lose radio contact in a newly remodeled wing. A district may believe an "automatic lockdown" command secured every exterior opening although one door was propped. Each is a different gap between an initiation and the protective result.

Duress activation should be distinguished from the institution's broader responsibility to notify. A signal may indicate a request for assistance or an immediate violent threat; the meaning, recipients, authorized automatic actions, location, acknowledgement, verification threshold and cancellation are not necessarily identical. Design must avoid an unnecessary confirmation delay in the face of reasonably apparent immediate danger while also managing accidental activations and misinterpretation.

The first person to recognize danger is not responsible for making the whole warning system work. Protect first. Communicate, activate an alert or provide assistance only when safe to do so. The institution must have overlapping methods that can extend actionable warning when a witness cannot.

The Missing Seconds as the operational test

The rock strikes the water at the point of the event. People nearby may recognize danger and take protective action before a central system even knows. The warning then ripples—through nearby voices, an authorized radio call, a silent duress activation, school administration, dispatch, mass notification and responding agencies. Those pathways do not travel at equal speed. A successful signal at one point is no proof that every student, staff member, visitor, substitute, bus driver or exterior group has usable information.

Ask more than "How fast does the button work?" Ask when each person could reasonably recognize, receive, interpret and act; which location was displayed; who acknowledged the alarm; what public safety received; how the information was updated; how the school handled people already outside; and what was still possible when the normal network or power system was unavailable. The central performance question is the time between human recognition and achieved protection—not just the device's transmission time.

After installation, the work continues

Familiarity and reliability change. Staff turn over, students and schedules change, buildings are renovated, networks are reconfigured and batteries age. Systems must be trained, supervised, maintained and retested. Before a controlled functional exercise, schools must coordinate with monitoring providers, dispatch and relevant public-safety partners to prevent unintended deployment. The exercise should show not only that a device transmitted, but that the appropriate humans received and understood the information and the intended response could follow.

A review may reveal that existing technology can be used more effectively through training and integration. It may also expose a genuine need for improved coverage, an independent pathway, revised procedures or additional resources. The district—not a vendor's feature list—must determine its operating objective with its own partners. Good policy and a sound purchase decision are starting points, not proof of sustained capability.

Official resources for continued examination

Make Our Schools Safe, Alyssa's Law Solution Guide (February 2026): makeourschoolssafe.org/alyssas-law-guidance

MOSS, Alyssa's Law state legislation information (recheck actual enacted state statute): makeourschoolssafe.org/alyssas-law

PASS, Seventh Edition guidance and resources (2025): passk12.org/guidelines-resources

Source distinction: PASS and MOSS provide professional/organizational guidance. Binding obligations depend on enacted law, adopted codes, agency rules, and local authority. This independent discussion is intended to enhance capability, not propose a national model or displace an existing emergency plan.

CHAPTER 16 | Interoperability Is Bigger Than Technology

Two systems exchanging data are not necessarily an interoperable school response. People must understand their roles and receive usable information. This chapter connects policy, buildings, technology, communication, public safety, accessibility, families, accountability and care into one operating picture.

Interoperability layer	Questions to ask
People	Do students, staff, substitutes, facilities, transportation and responders understand their roles and each other's assumptions?
Procedures	Do lockdown, evacuation, fire response, reverse evacuation, reunification and care work together under competing conditions?
Building	Do doors, egress, fire protection, compartmentation, utilities and accessibility support the protective action?
Communications	Can the right people initiate, receive, understand and update the message?
Technology	Do access control, video, duress, intrusion, fire alarm, PA/MNS and networks support operations rather than create hidden dependencies?
Public safety	Do fire, law enforcement, EMS and emergency management use compatible assumptions, maps, access and terminology?
Care / recovery	Can the system move from immediate protection into medical care, accountability, reunification and long-term support?

In my Arapahoe retrospective, I stated the point plainly: interoperability is the entire operating picture, not only radios. [P1] The fire-alarm/lockdown issue is a textbook interoperability test. Each individual system can technically "work" while the combined system produces an unsafe movement decision if no one has planned how the functions interact.

IF ONE PART DOES NOT UNDERSTAND THE OTHERS, THE SYSTEM IS NOT INTEROPERABLE.

Source / alignment notes: [P1] [R4] [R9] [R17]

PART V

Protective Actions and Changing Conditions

Prepared options meet actual conditions: inside, outside, between hazards and during changing risk.

A practitioner journey through people, plans, systems and changing conditions

OPTIONS / EXPLANATORY LANGUAGE

Shelter - Evade - Defend - Care

Human actions described for the K-12 environment; not a proposed national model, competing program, mandated acronym or replacement for local procedures.

ORIGINAL PRACTITIONER INTENT

The author used these words to make familiar survival options understandable within schools and to emphasize **Care**. The widely known **Run-Hide-Fight** language addresses analogous immediate survival choices; federal school resources also discuss emergency medical aid. Schools may retain their own adopted terminology.

Options are not a four-step sequence

HUMAN ACTION	MEANING / BOUNDARY
SHELTER / SECURE	Use a safer available room or protected location; close and secure the opening when possible, reduce exposure, preserve accessible egress, and reassess if the space becomes unsafe.
EVADE / SELF-EVACUATE	Move away from the danger when a safer practical route exists. Avoid routes leading toward an apparent threat. Reach a safer destination; become accountable when safe.
DEFEND / LAST RESORT	When immediate lethal violence cannot be avoided and neither effective shelter nor safe movement is available, an individual may need last-resort resistance to survive. This is not a student security assignment or schoolwide tactical curriculum.
CARE / WHEN SAFE	Call for help, reassure, provide first aid or bleeding control within training, support others' access needs, and assist with accountability, reunification and recovery - without moving into danger.

One student may shelter while another safely moves away. A third person may need immediate care after reaching protection. Changing conditions can alter a reasonable choice. No one is assigned to confront a threat, search buildings or rescue through active danger.

Source / method: [S2] FBI Run-Hide-Fight / school video with bleeding control; [S1] U.S. Department of Education Active School Shooter Situations: Resources for K-12 Staff; [P2].

OPTIONS / HUMAN CAPABILITY

Empower without deputizing

The task is to strengthen age- and role-appropriate choices already recognized in leading emergency-preparedness guidance.

What each person should understand

SETTING / PERSON	APPROPRIATE EDUCATIONAL EMPHASIS
Younger students	Recognize danger in simple terms, move with a trusted adult when possible, find a safer place, seek help; no independent tactical responsibility.

Older/developmentally capable students	Know ordinary door operation and available safer routes; shelter or move away from obvious immediate danger; communicate and enter accountability when safe.
Staff, substitutes and coaches	Know role-based authority to initiate protective action, supervise within capability, use available notification, adapt to the immediate condition and continue to care when safe.
Transportation / outdoor staff	Know safer movement options, how to stop inbound exposure, what recipients can be reached, and how to report groups' locations after movement.
District and public safety	Maintain command, approved protocols, accessible notification, reliable facilities, responder access, reunification, correction and verification. Do not delegate systemic responsibility to witnesses.

Three boundaries that must remain visible

- **No required confrontation:** last-resort defense is a survival consideration, not a graded student outcome or employment obligation. Avoid frightening or deceptive simulation.
- **No unsafe reporting duty:** immediate self-protection takes precedence; alert, warn, assist and report **only if safe to do so**.
- **No override of law or code:** local EOPs, student-service considerations, accessibility, adopted fire/egress rules and public-safety/AHJ coordination control implementation.

LEARNING OUTCOME

Ask students and staff, calmly and in age-appropriate terms, what they would do if the nearest expected adult, announcement, room or route were unavailable. Identify safe options; do not measure courage.

Source / method: [S1] U.S. Department of Education K-12 response guidance; [S5] 2025 National Academies study on school active-shooter drills; Chapters 3-12 and 29-31.

OPTIONS-BASED PROTECTIVE ACTIONS

A default action plus structured permission to adapt when the conditions truly change.

CHAPTER 17 | What Options-Based Preparedness Actually Means

Two people in the same emergency may need different protective options. The phrase 'options-based' describes practices ranging from calm education to high-intensity exercises, and these should not be confused. This resource proposes no national model. It invites districts to strengthen existing procedures through structured adaptability: a trusted default and bounded alternatives when conditions change.

STRUCTURED ADAPTABILITY

Use the established protective action as the default. Understand the purpose of that action. Recognize a limited set of conditions that may make another protective action safer. Change only when the conditions justify it, and continue moving away from the greatest immediate danger.

CISA's 2025 landscape assessment catalogs multiple active-shooter drill and program approaches and explicitly does not endorse one program over another. [R3] The National Academies cautions that options-based practices have limited evidence and may have mental, emotional and behavioral health impacts, especially if implemented inappropriately or without developmental tailoring. [R1] Those cautions reinforce the need for precision: the core education described here should be calm, role-appropriate, developmentally tailored and separated from unnecessary high-intensity simulation.

Default protective action	Condition that may justify adaptation	Possible life-safety objective
Secure in a locked room during an interior violent threat	Room becomes unsafe from smoke/fire or the threat is immediately breaching while a safe exterior route exists	Move away from both hazards using the safest available route.

Default protective action	Condition that may justify adaptation	Possible life-safety objective
Move inside during a threat believed to be outside	Threat is between the group and the entrance	Move away to another safer location rather than toward the threat.
Use assigned fire evacuation route	Violence or gunfire is occurring on or near that route/assembly area	Avoid the new hazard; use alternate movement and accountability plan.
Wait for a schoolwide message	Immediate life-threatening violence is directly observed/heard before message arrives	Take immediate protective action; notify when safe.
Remain with the class	Student is separated from adult supervision when danger appears	Use previously taught nearest-safe-space / move-away / get-help concepts.

Source / alignment notes: [R1] [R3] [R4] [P1] [P2]

CHAPTER 18 | Lockdown: What It Is - and What It Is Not

A lockdown announcement alone does not make a classroom protective. Doors must latch; people must know what to do; and movement must not increase exposure. Lockdown remains an essential action when immediate violence makes movement dangerous. Its protective value depends on secured openings, communication, reduced visibility and readiness to change if the space becomes unsafe.

A capable lockdown considers

- who may initiate the protective action under local policy;
- how occupants secure the room without entering the danger area;
- whether the door actually latches and locks;
- where occupants can reduce line-of-sight exposure while preserving mobility and egress;
- what students and staff do in hallways, restrooms, common spaces and exterior areas;
- how communication reaches regular staff, substitutes, contractors, visitors and after-hours users;
- how people receive an all-clear or responder direction without opening doors prematurely;
- how fire, smoke, structural damage or another immediate hazard changes the protective decision;
- how accountability and reunification work for people who successfully evade.

Lockdown is not "do nothing." It is an active protective posture. Nor should it be interpreted as an unconditional command to remain in a location that has become immediately life-threatening for another reason. The governing objective is preservation of life under the conditions that actually exist.

PRACTITIONER TEST

If the plan only explains what a teacher does in a locked classroom after hearing the announcement, the plan is incomplete.

Source / alignment notes: [R4] [R5] [R10] [P2]

WHEN LOCKDOWN CONDITIONS CHANGE

The "what if?" is not a distraction from planning. It is how weak assumptions are found.

CHAPTER 19 | The What-If Discipline

What if an adult is absent, an exit is blocked or a warning never reaches the athletic field? Preparedness should ask such questions before an emergency. The goal is not to invent endless frightening scenarios; it is to identify a manageable set of changed conditions, critical dependencies and populations that might otherwise have no usable protective option.

Questions every building safety team should be able to answer

- What if the threat is recognized before the schoolwide notification?
- What if the threat changes location?
- What if the student is in a hallway, restroom, cafeteria, gym or locker room?
- What if a student reaches an empty classroom first - can that student close and secure the door?
- What if the teacher or supervising adult is unavailable, injured or unfamiliar with the building?
- What if the fire alarm activates after lockdown?
- What if the fire alarm activates first and then violence becomes apparent?
- What if there is actual smoke or fire in the protective room?
- What if the normal exit route or assembly area is near the threat?
- What if the violent threat is outside the building?
- What if the PA, radio, cellular network, access-control network or power system fails?
- What if students successfully leave campus - how do they become accountable without returning?
- What if the planned protective action does not work for a student with mobility, sensory, cognitive, medical or communication needs?

The answers should not live only in a binder. They should influence building walkthroughs, staff education, student education, drill design, communications, facilities work orders, responder preplanning, parent communication and after-action review.

A USEFUL TEST

If a "what if?" question repeatedly produces the answer "we would have to figure that out at the time," it probably belongs in the EOP, training or system-verification process now.

Source / alignment notes: [R4] [R5] [P1] [P2]

CHAPTER 20 | Default Action Plus Permission to Adapt

A reliable default helps people act under stress, but no script predicts every hazard. The alternative is not unlimited improvisation. Schools can enhance existing practice by teaching observable reasons to change action and bounded options suited to individual roles and developmental levels.

Step	Question	Examples
1. Recognize	What is happening immediately around me?	Announcement, direct observation, gunfire, smoke, visible fire, people fleeing, responder direction.
2. Use the default	What protective action normally fits this hazard?	Lockdown, evacuation, shelter-in-place, reverse evacuation, secure perimeter.
3. Check conditions	Is the default still protecting me from the greatest immediate danger?	Route blocked, threat nearby, smoke entering room, exterior threat between group and entrance.
4. Adapt if necessary	Is there a safer available option I have been taught?	Nearest secure room, alternate exit, movement away, off-campus safer location.
5. Communicate/account	When safe, who needs to know where I am and what I observed?	911, school system, responder, reunification/accountability channel.
6. Care	When reasonably safe, what help can I provide within my training?	Reassure, basic first aid, bleeding control if trained, support access needs, relay information.

For early learners, the framework may be reduced to simple trusted-adult and move-to-safety concepts. For older students and adults, it can include route awareness, door knowledge, independent movement and accountability. The default remains important. Adaptation is not the starting point; it is the contingency for when the default no longer serves its protective purpose.

OPTIONS-BASED PREPAREDNESS IS STRUCTURED ADAPTABILITY - NOT FREE-FORM IMPROVISATION.

Source / alignment notes: [R1] [R3] [R4] [R6]

THE FORGOTTEN SCENARIO: THE THREAT IS OUTSIDE

A lockdown plan that only works for occupants inside classrooms is incomplete.

CHAPTER 21 | The Forgotten Scenario: The Threat Is Outside

The first person recognizing danger may be on a playground, athletic field, bus loop or path between buildings. The threat itself may also be outside. Classroom-centered assumptions overlook these moving populations. Exterior preparedness must consider the direction of danger, available protective spaces, multiple safer routes and destinations, warning coverage and accountability after people move away.

DIRECT POSITION

A school that has an interior lockdown plan but no exterior active-threat plan has an incomplete active-threat plan.

The central exterior question is simple: what if moving into the building requires moving toward the threat? A blanket “get inside” instruction can become dangerous if the threat is between the group and the entrance. Exterior planning therefore needs a default plus alternatives: enter a nearby safer building when doing so moves away from danger; move farther away when the school itself is the dangerous location; use substantial barriers or terrain when immediately necessary; and continue to a predetermined safer destination when possible.

In my legacy LPS training, I devoted substantial attention to playgrounds and exterior spaces. It asked staff to identify exits, evaluate safer terrain and physical barriers, create different escape plans, and pre-identify places off campus where groups could go. [P2] That material is not being presented here as a national model. Its significance is the practitioner question it asked years ago: “What are people outside supposed to do when the threat is not where the normal plan assumes?”

Exterior planning must address

- where groups are located throughout the day and who normally supervises them;
- which entrances are safer from each exterior activity zone - and when no entrance is safer;
- off-campus safer locations and routes that do not funnel everyone to the same point;
- how students separated from adults move toward safety without returning to the threat area;
- how 911/public safety and school command learn that groups have left campus;
- how accountability/reunification works for successful self-evacuation;
- weather, footwear, terrain, fencing, roads and accessibility realities;
- how arriving buses, deliveries, visitors and parents are redirected away from the danger.

Source / alignment notes: [R4] [R5] [P2]

THE FORGOTTEN EXTERIOR / LOCATION MATTERS

The threat - or the people - may be outside

A schoolwide lockdown message cannot assume every occupant is already behind a classroom door.

CONDITION	IMMEDIATE QUESTION	LOCALLY EVALUATED OPTIONS
Threat inside / people outside	Would entering the building increase danger?	Remain away; move to a reasonable safer destination; do not cross back toward the threatened building; account when safe.
Threat outside / people inside	Could routine evacuation or dismissal expose occupants?	Keep affected people away from exterior danger; secure/hold movement as conditions and local plan require.
Threat outside / people outside	Is the nearest doorway on the danger side?	Move away from danger toward an available safer place; do not require one entrance, route or gathering point.
Threat moves / people transitioning	What if buses, walkers, outdoor teams and dismissal groups receive different updates?	Stop or redirect inbound movement, issue accessible updates, use alternate routes and reconcile locations.

Three exterior planning assumptions to challenge

- **Inside does not always mean safer.** An already-safe exterior group should not be told to re-enter a threatened building

solely because the word "lockdown" was transmitted.

- **A designated rally point is not an unconditional destination.** Threat location, wind, roadways, accessibility, congestion, supervision and emerging information may change what is safe.
- **Exterior notification is a distinct operating requirement.** Gym, stadium, bus, portable and after-hours users may not be on the classroom PA or app distribution list.

Source / method: Chs. 21–23, Appendix D and Appendix E; [S7] FBI Sparks Middle School chronology; [S9] Westside case; local public-safety and EOP approval controls.

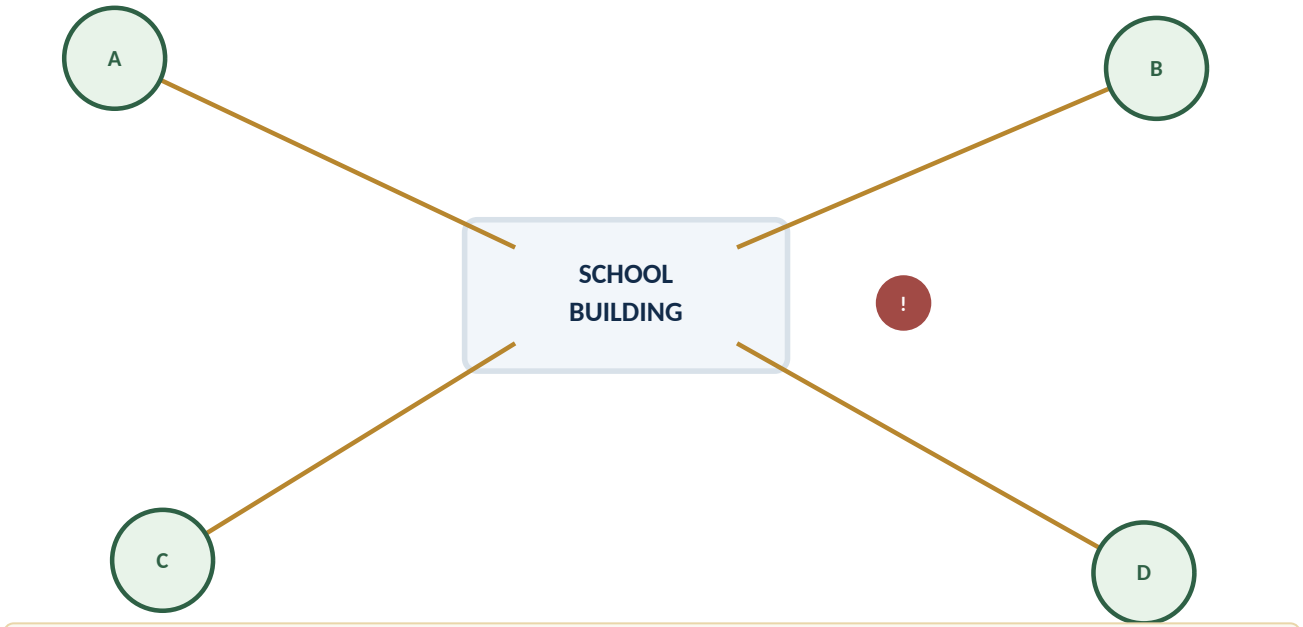
EXTERIOR / PRACTITIONER EXPERIENCE

Multiple directions, flexible rally options

An example from the author's district planning, not a universal blueprint or a replacement for established reunification procedures.

In prior school planning, I identified potential rally/accountability locations in **more than one direction** around buildings. I did not want one prescribed path to send people toward the danger. Different directions and destinations gave the team options to evaluate according to the actual conditions.

Conceptual movement choices



DO NOT TURN ALTERNATIVES INTO RIGID COMMANDS

A-B-C-D are illustrative possibilities, **not assigned destinations in every event**. The safest available location may change rapidly, or a planned rally point may be unreachable. People should not move toward immediate danger just to satisfy a location requirement.

What every potential location requires

- Threat-direction and route assessment; roads/traffic, boundaries, terrain, fencing, severe weather and accessibility.

- A safe means to communicate from that location; responsible adults where feasible; an approved way to enter district accountability and reunification.
- Regular updating after construction, new activities or changed conditions. Specific site choices remain in protected district plans, not a public guide.

Source / method: Labeled personal practitioner example. Chs. 21–23; Appendices D, G, O and R. Local districts and public safety determine actual routes and rally locations.

EXTERIOR / NOTIFICATION + ACCOUNTABILITY

The warning must reach people beyond the PA

The exterior scenario is both a movement problem and a communications problem: the first observer, the first protected group and the eventual command center may be in different places.

POPULATION	HOW WARNING IS VERIFIED	WHAT HAPPENS AFTER MOVEMENT
Playground / field / courtyard	Test actual audible, visual and backup reach. Identify the supervisor and alternative for a failed system.	A group reports its status when safe; does not return toward the hazard merely to be counted.
Athletics / stadium / shared use	Test event-hour staffing and a clear method for visitors, officials, volunteers and contractors without district logins.	Event lead communicates with school/public safety and a locally evaluated safer destination.
Portable buildings / remote sites	Test door options and both primary and alternate warning paths in actual spaces.	Independent protective options and a known accounting method.
Buses / vehicles approaching	Transportation dispatch and approved radios/data paths reach drivers in motion, including routes near dead zones.	Stop/divert inbound movement; keep bus number, location, rider status and assistance needs available.
Walkers / off-campus students	An appropriate, accessible way to obtain official updates without requiring return to campus.	Report safe status by an available method; follow authenticated return/reunification direction.

Recovery of the operating picture

People who safely moved in different directions may be reported at a business, another school, public location, bus, family contact point or medical facility. Reconcile time-stamped reports without counting an unverified rumor as a confirmed location, and without directing anyone back toward the threat.

EXERCISE QUESTION

If the first observation comes from outside, can the warning reach the building? If the first warning comes from inside, can it reach the people already outside? Verify both directions.

Source / method: Chs. 22–23 and Appendices D, F, G and R; [S1] U.S. Department of Education K-12 school response guidance.

CHAPTER 22 | Exterior Options, Movement and Accountability

Leaving danger does not complete the protective response. People may reach different safe places while a district still lists them as missing. In my district work, multiple potential rally locations in different directions helped avoid reliance on one route. That is one local example, not a universal rule. Accountability, communication and reunification must accommodate safer movement.

Phase	Exterior life-safety objective	Planning detail
Recognize	Do not move toward obvious violent danger.	Use immediate sights, sounds, trusted warnings and official notifications.
Move	Increase distance from the threat using the safest practical route.	Avoid predictable congregation points that are in or near the hazard area.
Protect	Use substantial physical barriers/safer terrain when immediate movement is not possible.	Keep student language simple; avoid turning basic safety education into tactical training.
Continue	Reach a predetermined or reasonable safer destination when possible.	School-specific off-campus locations should be evaluated with public safety and accessibility in mind.
Communicate	Call 911/report when safe; do not assume someone else has already reported.	Teach concise location and condition reporting appropriate to the age/role.
Account	Enter the district's accountability/reunification process without returning toward danger.	Plan for phone failure, students without devices, and multiple off-campus groups.

Students should also be taught an important boundary: once they reach a reasonably safe location, they should not automatically return toward the school to find a teacher, sibling, backpack, vehicle or friend. A trusted adult remains important, but "find an adult" must not mean "go back through the danger to find your usual adult."

STUDENT-FRIENDLY CONCEPT

Move away from the danger. Stay in the safer place. Find a safe adult when you can. Do not go back toward the danger.

Source / alignment notes: [P2] [R4] [R6]

CHAPTER 23 | Arrival, Dismissal, Buses, Athletics and Shared Spaces

Arrival, dismissal and evening events place people in motion with open doors and divided supervision. A classroom protective action may not fit a bus loop or athletic field. Planning must identify who can warn each group, stop unsafe arrivals and support safer options as conditions change.

Arrival and dismissal

- How are walking students, parent vehicles and buses stopped before they enter the threat area?
- Who has authority to suspend unloading, loading or release immediately?
- What do students already outside do if reentry would move them toward the danger?
- How are families prevented from self-deploying into an active scene?
- How are open or supervised entry doors secured without trapping occupants?

Transportation

- What does a bus driver approaching campus do when an active-threat alert is received?
- Where can loaded buses stage safely away from the campus?
- Can dispatch communicate with all vehicles through more than one pathway?
- How are students on buses accounted for and reunited?
- What is the plan when routes are already operating and the campus becomes inaccessible?

Athletics, events and shared-use spaces

- Who is responsible for protective decisions when the event occurs after normal school hours?
- Do coaches, officials, volunteers and facility renters know notification methods and safer destinations?
- Are exterior gates, stadium exits and parking routes considered in active-threat planning?
- Can the plan work when hundreds of people are not carrying school-issued radios or logged into district applications?

The practitioner lesson is not to create a separate emergency plan for every activity. It is to test the same life-safety concepts under different operating modes. The building may be the same; supervision, access, communications and population are not.

Open-campus lunch and students already off campus

High schools with open-campus lunch, work-study, dual-enrollment movement or other authorized off-campus activity need an explicit rule for students who are away when lockdown begins. The default should not require a student who is already outside the emergency perimeter to return toward a threatened campus simply to satisfy attendance expectations. The EOP should tell those students to remain at or move to a known safe location, avoid the school and public-safety perimeter, monitor official information, make themselves accountable through the district's established process when communications permit, and return only after authenticated direction.

This requires an accountability method that is realistic when cellular networks are congested. A district might use more than one reporting path - school application or form when available, phone/text to a designated number, contact through a parent or supervising adult, or later reconciliation at reunification - but no method should require students to move back toward danger because an electronic check-in failed.

Source / alignment notes: [R4] [R5] [P2]

PART VIII

OTHER CONDITIONS THAT CAN COLLIDE WITH LOCKDOWN

The protective action must remain connected to the hazard picture.

School bus attack, shooting or hostage event

A school bus is not simply a transportation asset. During a route it is an occupied school environment operating beyond the controlled perimeter of a campus. A driver may be the first adult to recognize a violent condition, and dispatch may be the only school function with immediate knowledge of the bus location. The EOP should therefore treat bus violence, an attack near a bus, an armed passenger, a vehicle assault, and a hostage condition as specific operating scenarios rather than assuming the building lockdown plan can simply be transferred to a bus.

The driver should not be expected to become a tactical security responder. The driver's life-safety responsibilities are to recognize danger, move the bus or passengers toward safety when a safe option exists and local procedure supports it, communicate when reasonably possible, account for passengers, and

provide dispatch and 911 with usable location and condition information. A bus that can safely continue away from an exterior threat presents a different problem than a disabled bus, a bus already under fire, or a bus in which the threatening person is on board. Those distinctions belong in scenario-based training.

BUS DURESS IS A RESPONSE CHAIN

A bus emergency button, radio emergency feature or mobile duress device is valuable only if dispatch knows which bus activated it, where the bus is, what the signal means, who acknowledges it, how 911 or law enforcement is contacted, what happens if the driver cannot speak, and what the fallback is when the primary radio or cellular path fails.

For hostage situations, school personnel should support the public-safety response rather than improvise negotiation tactics. Transportation can provide passenger manifests, route and GPS history, driver information, student medical/access needs, bus camera information, family contact data and a controlled communication channel to incident command. Law-enforcement crisis/hostage negotiation and tactical decisions remain public-safety functions.

Evacuation fleet capacity is time-dependent

A district can own a large bus fleet and still have limited evacuation capacity at a particular hour. The operational question is not “How many buses do we own?” It is “How many usable buses, qualified drivers and attendants can we place at a safe loading site now?” During the middle of the school day, many route drivers may no longer be at the transportation center. During arrival and dismissal, buses and drivers may already be committed across the community. Activity buses, special-education routes and contractors further change the picture.

Transportation plans should test real capacity at different operating times - for example, 8:45 a.m., 11:30 a.m., 2:30 p.m. and 7:00 p.m. - and identify on-call drivers, alternate qualified drivers, accessible vehicles, contractor resources, mutual-aid agreements, alternate loading points, communications pathways and the time required to mobilize them. FEMA planning guidance emphasizes identifying transportation resources, communicating with drivers, preserving accountability and adapting when protective actions change. [R33][R34]

Gas leak and airborne-hazard example: transportation may support either movement or shelter

The natural-gas scenario is a useful reminder that "evacuate" is not automatically synonymous with "go outside and load buses." A suspected release inside a building may require prompt movement away from the affected area and evacuation under fire/utility direction when a safe route exists. A significant exterior or neighborhood release can create the opposite problem: outside air, a normal bus loading area or the road network may be the hazard. Depending on the substance, source, wind/plume, building condition and responder assessment, shelter-in-place, reverse evacuation, relocation within the building, HVAC/outside-air control, or a delayed/alternate evacuation may be safer.

Transportation dispatch should be able to stop inbound buses from entering a threatened campus, divert routes, identify an alternate loading or reunification site, and communicate verified direction to drivers already in motion. Buses should not be sent into a gas plume, active fire area, police perimeter or violent-threat zone simply because the written plan identifies the normal bus loop as the evacuation point. Transportation leadership belongs in district ICS so that routing decisions reflect the same operating picture used by administrators and public safety.

CHAPTER 24 | Competing Hazards and Alarm Collisions

One hazard rarely pauses while another is addressed. A violent threat may coincide with smoke, severe weather, a medical emergency, a gas release or damage to the building. The familiar fire-alarm/lockdown collision is only one example. Schools should prepare people to recognize the protective objective under actual conditions rather than assume that one signal automatically cancels every other concern.

Changing condition	Immediate planning question	Possible system response to pre-plan
Smoke / fire / heat	Can occupants safely remain in the current protective space?	Alternative route/zone, fire information, responder direction, compartmentation.
Natural gas / hazardous material	Is evacuation, shelter-in-place or HVAC action safer given plume/location?	Facilities/AHJ procedure, HVAC control, perimeter and wind considerations.
Severe weather	Does the safest weather shelter conflict with violent-threat protection?	Pre-identify alternate protected spaces and decision thresholds.
Explosion / structural damage	Is the room, corridor or exit physically usable?	Damage assessment, alternate movement, fire/EMS coordination.
Medical emergency	Can care begin without exposing additional people?	Immediate care in place, 911 information, rescue task force/public-safety interface.
Exterior police activity / gunfire	Does going outside or returning to the building increase exposure?	Reverse evacuation, movement away, hold buses, secure perimeter.
Power / network failure	What functions become unavailable or change state?	Mechanical locks, backup power, radio/PA alternatives, manual accountability.
Conflicting announcements	Which instruction reflects the current human decision, and which was produced automatically or is now obsolete?	Origin-aware plain-language update, message priority, human decision authority, supersession/cancellation and closed-loop confirmation.

ALARM COLLISION PRINCIPLE

An emergency signal is important information about a hazard or system condition. It is not omniscience. It cannot describe every immediate hazard at every occupant's location.

Local procedures should define how authoritative messages are prioritized and updated, but occupants must still be permitted to respond to an immediate danger they can directly perceive. That is especially important during the seconds before a common operating picture exists.

Source / alignment notes: [R4] [R5] [R17]

Alarm investigation during a violent-threat condition

A normal response may include investigating the alarm source. During a known or reasonably apparent violent threat, do not send an unprotected custodian, administrator, SRO, teacher or fire technician toward the alarm origin merely because the ordinary procedure calls for investigation. Begin with information that can be obtained without unnecessary exposure: panel point/zone and device type, detector history, monitoring-center information, nearby camera views, access-control/duress activity, radio reports, occupant reports, smoke-control status and correlated ECC/PSAP information. Physical investigation occurs only when the locally approved procedure, current threat picture and command direction make it reasonably safe.

In my own systems planning, I explored the use of camera coverage at manual pull-station locations and the automatic or rapid retrieval of camera views for the floor or zone associated with an activation. I also considered audio capability where lawful and appropriate. The purpose was not surveillance for its own sake. It was to answer a life-safety question faster: is the activation associated with visible smoke or fire, a person intentionally using the station, violent activity, or a condition that still cannot be determined? That approach is an example of verification architecture, not a universal design requirement.

REMOTE INFORMATION BEFORE UNNECESSARY EXPOSURE

During a known or apparent violent threat, use available panel, video, sensor, radio and occupant information before sending a person toward an alarm source. If physical investigation is necessary, it should be coordinated through the incident structure and the appropriate fire/law-enforcement authority.

Silencing, reset and alarm-control authority

Alarm notification can become operationally important in two directions. The horns and strobes may be lifesaving when a real fire is present, yet prolonged alarm noise can also mask radio traffic, PA instructions and responder communication during a violent event. A district should therefore know who is authorized to silence notification appliances, who is authorized to reset the fire-alarm system, what information is lost when each action occurs, how the initiating condition remains visible, and how the system is restored. These are fire/life-safety decisions that must be developed with the AHJ, fire service and qualified fire-alarm professionals.

At LPS, I worked with our fire/life-safety technical personnel and public-safety partners on defined authority for managing alarm notification under specific emergency conditions. That local arrangement allowed trained personnel to control alarm output when appropriate while preserving the larger response. I include the example because it shows what pre-incident coordination can accomplish; it should not be interpreted as a recommendation that a school independently disable or reset a fire-alarm panel without local code authority and a written procedure.

Mass-notification priority, origin and intelligibility when alarms compete

The planning team should physically test whether a lockdown or other protective-action message can be heard and understood while fire horns, strobes, voice evacuation, mechanical noise, bells and other systems are operating. Intelligibility in a quiet conference room does not prove intelligibility in a cafeteria, gym, stairwell, shop, music room, restroom, mechanical area or crowded hallway. The system should also be tested for people who are deaf or hard of hearing, blind or low vision, have sensory needs, or use a language other than English.

In my LPS work, I used coordinated tones and plain-language messages that repeated until authorized termination, with more than one activation pathway. That is a practitioner example, not a statewide Tennessee model or a universal architecture. The transferable lesson is that a trusted platform may still generate an automatic message. The system and training must distinguish automatic alarm output from a human-initiated change, keep the current protective message recognizable, and provide redundant ways to issue, update, cancel and record direction.

FIRE ALARM DURING AN ACTIVE OR APPARENT VIOLENT THREAT

This issue has happened repeatedly. Schools should answer it before the next alarm.

CHAPTER 25 | Why the Fire-Alarm Question Cannot Be Avoided

A fire alarm and lockdown can both signal legitimate protective needs. Ordinary fire procedures often move people toward corridors and outside, while lockdown usually reduces exposed movement during immediate violence. When both conditions occur, neither signal alone describes the whole danger. Teams must develop locally approved ways to reconcile hazards, understand building behavior and communicate deliberate changes in protective action.

The historical record shows multiple pathways into this conflict: attackers have deliberately activated alarms; incendiary effects have triggered alarm and sprinkler systems; gunfire-related smoke has activated detection; staff or students have pulled alarms as an attempted warning; shootings have occurred during or after a fire drill; occupants have remained secured while alarms sounded; and alarm noise has complicated responder operations. [R12]-[R22]

THIS IS NO LONGER A THEORETICAL EDGE CASE

Tennessee enacted Public Chapter 563 and state agencies issued Fire Alarm Delayed Evacuation Response Guidance requiring covered schools to develop a procedure for determining the cause of fire-alarm activation, including the potential for an active-shooter event, in consultation with fire and law enforcement and in compliance with code. State guidance specifically notes that ammunition smoke may activate a school fire alarm and move people into unsafe areas. [R17]

Tennessee's approach is a state-specific example, not a national mandate. Its significance is conceptual: a state-level school-safety framework now expressly recognizes that a fire alarm can intersect with an active-shooter event and requires schools to develop a coordinated procedure rather than assume the alarm always means the same thing in every circumstance.

The planning team must answer three different questions

A fire alarm tells us that a fire-alarm system input or manual device has reached the alarm state. It may be the first indication of a real fire, smoke or other dangerous condition and must be evaluated urgently.

The alarm does not, by itself, establish the cause, location, route safety or relationship to the violent threat. Nor does an automated voice/text output prove that a human decision-maker evaluated those conditions.

Protective action should therefore follow verified information, immediate local conditions and deliberate human direction under the local command structure. In a known or reasonably apparent violent threat, maintain reasonable protection unless fire, smoke, heat, structural danger or another immediate condition makes the location unsafe, or authorized incident command deliberately changes the action.

Source / alignment notes: [R17] [R12]-[R22]

CHAPTER 26 | What History Teaches About Fire Alarms and Violent Threats

No incident establishes a universal protective-action rule. History is useful when it reveals patterns across different causes and outcomes. This chapter compares documented fire-alarm interactions and separates established facts from uncertainty so teams can learn without oversimplifying events.

Historical pattern	Illustrative incidents	Planning lesson
Alarm/fire deliberately used as part of attack environment	Olean High School (1974); Westside Middle School / Jonesboro (1998)	Do not assume an alarm cannot be manipulated to create movement or draw responders.
Attack-generated fire/smoke activates alarm systems	Columbine (1999); Marjory Stoneman Douglas (2018); Covenant School (2023)	A fire alarm can be a real system response to conditions produced by violence even when no pull station is activated.
Alarm activated as an attempted warning	Santa Fe High School (2018); Marysville-Pilchuck has reported alarm activity, though available official records reviewed here do not establish the initiator	Well-intended alarm activation can cause protective movement that does not match the violent-threat hazard.
Shooting during/after fire drill or evacuation	Carver High School (2013); Jeremiah E. Burke High School (2016)	Predictable mass movement and exterior congregation can create exposure.
Alarm sounds while occupants remain secured	Arapahoe High School (2013); Central Visual & Performing Arts (2022)	People may receive competing signals; plans must explain how to maintain protection while reassessing fire conditions.
Alarm affects responder environment	Columbine (1999); Covenant (2023)	Audibility, visibility, doors, fire-protection functions and responder movement can be affected.

This review deliberately separates confirmed cause from reported or unknown cause. Where primary or official records do not establish why the alarm sounded, the document says so. The goal is not to force every incident into the same narrative; it is to show practitioners the range of ways fire-alarm behavior can intersect with violent events.

HISTORICAL DISCIPLINE

Use incident history to identify conditions and questions - not to claim that every event proves the same tactic.

Source / alignment notes: [R12]-[R22]

CHAPTER 27 | Direct Guidance: Fire Alarm During an Active or Apparent Violent Threat

DIRECT OPERATIONAL GUIDANCE
A FIRE ALARM DOES NOT AUTOMATICALLY CANCEL A LOCKDOWN. Automatic system output is not the same as a deliberate human change in protective action. Stay protected from the known violent threat unless immediate local conditions make the space unsafe or authorized incident command explicitly changes the action. This is coordinated protection from competing hazards—not an instruction to ignore fire.

When an alarm sounds during a known violent threat, the real question is how occupants remain protected while the competing conditions are assessed. Horns, voices and automatic messages are important system outputs, not by themselves a human decision that movement is safer. Schools and responders must agree on who can change the protective action and how people move from immediate fire, smoke or other untenable conditions.

Authenticate the decision—not merely the channel

A message is not authenticated merely because it comes through the district's established emergency-notification system. The platform may be legitimate while the instruction was generated automatically by the fire-alarm sequence. The life-safety question is: did an authorized human, acting within the local incident-command/succession structure, deliberately decide to change the protective action after considering the competing conditions?

A pre-scripted or prerecorded message can communicate an authenticated change when that authorized human deliberately selects or initiates it after making the decision. The identical recording is not an authenticated human decision when it launches automatically from the alarm input. Local procedures and exercises must make that distinction visible to command and understandable to occupants.

Minimum characteristics of a deliberate change message

- issued by a designated human authority or successor acting within the local command structure;
- acknowledges the existing lockdown/violent-threat condition rather than sounding like a routine fire-only message;
- states the new action and identifies the affected population, location, route or destination when known;
- is delivered in accessible, redundant modes that can be heard/seen over alarm outputs;
- can be acknowledged or delivery-confirmed where practical, repeated, updated, cancelled and recorded; and
- does not prevent occupants from moving immediately when fire, smoke, heat, structural danger or another directly perceived condition makes their location unsafe.

Model messages for local adaptation

Lockdown remains: “AUTHORIZED UPDATE: LOCKDOWN REMAINS IN EFFECT. THE FIRE ALARM IS BEING EVALUATED. MOVE ONLY IF FIRE, SMOKE OR ANOTHER IMMEDIATE CONDITION MAKES YOUR LOCATION UNSAFE.”

Action changes: “AUTHORIZED CHANGE: [POPULATION/LOCATION] MOVE BY [ROUTE] TO [DESTINATION]. THIS CHANGE WAS ISSUED BY INCIDENT COMMAND. OTHERS MAINTAIN [CURRENT ACTION].”

The inverse is equally important: lockdown is not a command to remain in a room becoming untenable from fire, smoke, heat or structural danger. Occupants may move

away from immediate danger using the safest available route and should communicate and become accountable when safe. The objective is protection from both hazards, not blind obedience to either signal.

When a fire alarm activates and there is no announced, directly observed, heard, immediately reported or otherwise reasonably apparent violent threat, occupants should follow the established fire procedure unless verified conditions or official direction require another action. An ambiguous rumor, unverified social-media post or unexplained noise alone should not become a blanket reason to disregard a fire alarm.

Unverified does not mean unaddressed

A vague, anonymous or still-unverified threat may not justify overriding a normal fire alarm or immediately placing an entire school into the most restrictive response, but it should not be treated as operationally meaningless. A proportional safety posture can reduce exposure while investigators determine credibility. Depending on the threat and local procedure, that may include additional law-enforcement or security presence, checking exterior approaches and evacuation/assembly areas, increasing supervision, reviewing cameras and access-control activity, restricting selected movement, delaying arrival or dismissal, redirecting buses, protecting likely gathering areas, and establishing explicit triggers for escalation if new information appears.

Search activity should be disciplined. A bomb-threat or weapons search is not automatically a task for untrained classroom staff. The district should predefine, with law enforcement and other appropriate partners, who conducts visual checks, canine or explosive-device sweeps, perimeter checks and other threat-specific searches, what information staff may safely provide, and when an area is considered safe for movement.

A contemporary example comes from Cody High School in Wyoming in January 2026. After an AI-generated bomb-and-shooting threat, the district delayed the school start while police swept the building and perimeter; transportation was rerouted so students already in transit could be held at a secure location, and students who had already arrived were moved away from the main building. The threat was ultimately determined to be a hoax. The value of the example is not the particular tactic; it is the principle that uncertainty can be managed with proportionate precautions rather than either panic or inaction. [R45]

In my own district experience, vague or developing threats similarly caused us to increase staff, security and law-enforcement support and pay additional attention to exposed areas, including evacuation locations. I also experienced a fire-alarm activation during one such heightened-threat condition. I offer that as practitioner context, not as a substitute for independently documented incident evidence: the planning lesson is to think through how an otherwise routine alarm will be handled when the school already has reason to maintain an elevated safety posture.

What counts as reasonably apparent violent danger?

- an official lockdown/active-threat message;
- direct staff/security/law-enforcement notification;
- direct observation of an apparent imminent violent threat or weapon;
- gunfire or other immediate sounds reasonably believed to be serious violence;
- an urgent warning from a nearby person with apparent immediate knowledge;
- other immediate circumstances that would cause a reasonable person to believe a life-threatening violent event is occurring.

What should cause reassessment of remaining in place?

- visible smoke or flame;
- heat, smoke migration or loss of breathable conditions;
- structural damage or fire spread that threatens the space;
- a verified fire location that makes the current space or egress path unsafe;
- an immediate violent threat breaching or entering the protective space;
- a deliberate human-issued change from authorized incident command that identifies the new protective action and affected population/location, or direct release under the locally established public-safety procedure;

Local procedures must translate this standard into code-compliant action with the fire marshal/AHJ, fire service, law enforcement, ECC/PSAP, emergency management and school/district command. Tennessee's framework requires cause-determination planning and annual staff training; implementation should also define what happens when cause cannot be determined safely, prevent unprotected staff from being sent toward a possible threat, distinguish automatic outputs from human decisions, and teach the result to occupants and responding stakeholders. [R17][R46]

Indiana provides another current state-level example of direct competing-hazard guidance. Its State Fire Marshal guidance requires schools to plan for unplanned alarms and generally evacuate, but expressly recognizes an exception when an active shooter is verified on school property; it also identifies options such as monitored pull stations and positive-sequence investigation where the applicable code permits. The Indiana framework is jurisdiction-specific and should not be exported as a national rule, but it demonstrates that fire-safety authorities themselves are confronting the operational conflict rather than treating it as hypothetical. [R24]

THE OBJECTIVE IS NOT "FIRE ALARM WINS" OR "LOCKDOWN WINS." THE OBJECTIVE IS PROTECTING LIFE FROM THE CONDITIONS THAT ACTUALLY EXIST.

Source / alignment notes: [R17] [R4] [R5] [R12]-[R22] [P2]

CHAPTER 28 | Why the Fire Alarm May Be Sounding

An alarm sounds during an apparent violent threat. What caused it? Occupants should not be asked to diagnose a fire panel. But local planning teams must understand that different conditions can produce the same alarm and that a signal alone does not reveal the safest protective action for every person.

Possible initiating condition	What it means for planning
Actual unrelated fire	The school may be facing two independent life-threatening hazards.
Incendiary device or deliberate fire	The violent event itself may create a genuine fire requiring both violent-threat protection and fire response.
Smoke/dust/particulates generated by gunfire or attack activity	Automatic detection can activate without a pull station; the alarm may be real while the safest immediate action is not ordinary evacuation.
Manual pull station activated by attacker	The alarm may be intended to create movement or confusion.
Manual pull station activated by staff/student as warning	The intent may be protective while the resulting fire-evacuation behavior exposes other occupants.
Damage to system/device or another system interaction	The cause may be uncertain; occupants still need a default protective rule while designated staff/responders investigate when feasible.
Unknown cause	The plan must work even when complete verification is not available.

Jonesboro demonstrates deliberate alarm use to move occupants. Columbine demonstrates fire/incendiary effects and alarm noise complicating operations. Parkland and Covenant demonstrate attack-generated conditions activating detection. Santa Fe demonstrates reported manual activation as an attempted warning. The pattern is precisely why “alarm equals one unconditional movement response regardless of all other known information” deserves local review. [R12] [R13] [R16] [R18] [R21]

Source / alignment notes: [R12] [R13] [R16] [R18] [R21]

CHAPTER 29 | What Did the Building Just Do?

An alarm can change far more than the sound in a hallway. It may initiate voice messages, close or release doors, recall elevators, affect HVAC or smoke control, notify monitoring and reach dispatch. A school needs the actual cause-and-effect sequence for each building, including automatic outputs, authorized controls and what happens during degraded power or communications.

Verify, do not assume

- Which fire doors or hold-open devices release and close?
- Which access-controlled or electromagnetically secured doors change state, and which remain secure while preserving required egress?
- How do classroom/security locks behave during alarm and loss of power?
- what messages are produced automatically, which system has priority, what message identifies the current protective action, and whether an automatic instruction can be superseded promptly by a deliberate human-issued update;
- how message origin, initiation method, delivery, acknowledgement, update, cancellation and event logs are made visible to command and preserved for after-action review;
- What do elevators and stairwell systems do?
- What smoke-control or HVAC actions occur?
- What happens during waterflow, sprinkler activation or a supervisory signal?
- What event information is available at the fire alarm control unit, annunciator, security center or dispatch?
- Which systems remain available on backup power and for how long?
- Can responders enter areas that occupants have secured?
- Do doors that are intended to compartmentalize smoke/fire also support separation from a violent threat without creating egress problems?

The ICC educational-occupancy locking requirements reinforce the life-safety balance: intruder-resistant room locking must maintain egress and approved outside unlocking. [R9] Local fire and building codes, adopted editions, special locking provisions and the AHJ control. The practical question is broader: does the local safety team understand the cause-and-effect matrix connecting fire alarm, doors, access control, notification, HVAC, elevators, power and responder access?

Compartmentation, fire doors, rated corridors, smoke control, suppression and protected exits may create time and alternatives, but their value depends on the actual fire and building condition. Planning should ask what protection exists, how long it is expected to function, what compromises it, and how occupants know when remaining is no longer reasonable.

A fire alarm does not universally mean that every secured opening must become unlocked from the corridor side. Different code-compliant openings can and do have different approved behaviors. Classroom or occupied-space locking may preserve protection against unauthorized entry while still allowing immediate egress from inside; listed fire doors may close when hold-open devices release and continue to provide compartmentation; other electrically controlled or magnetic locking arrangements may be required to release under specific alarm, sprinkler or power conditions. The correct answer is opening-specific, hardware-specific, code-specific and dependent on the approved cause-and-effect sequence and local AHJ.

In my LPS work, we coordinated fire doors, selected gates and controlled openings with fire/life-safety and law-enforcement partners so that the approved emergency sequence could preserve appropriate compartmentation and security while maintaining required egress and fire-system functions. That local configuration is not presented as a national design. It illustrates the process this paper recommends: put fire, police, facilities, code officials and systems professionals at the same table and decide intentionally what each opening should do during normal operation, lockdown, fire alarm, sprinkler/waterflow, loss of power and responder override.

The local cause-and-effect matrix should extend beyond relays and doors. It should show detection input, automatic output, voice/text content, monitoring/dispatch action, human receiver, human decision authority, method to supersede or cancel, degraded mode, record retention and the owner responsible for validating the sequence after any software, hardware, policy or vendor change.

SYSTEM VERIFICATION QUESTION

When the alarm activates, do you know what every critical opening and life-safety system in the school actually does - not what people assume it does?

Source / alignment notes: [R9] [R17] [R12] [R18]

PART VI

Care, Accountability, Reunification, and Recovery

The work of protection continues after people reach a safer place.

A practitioner journey through people, plans, systems and changing conditions

CHAPTER 30 | Immediate Care, Accountability, Reunification and Recovery

Reaching a safer place does not end the emergency. People still need to be located, given appropriate care and reunited with those responsible for them. The plan must connect immediate first aid when safe, accessible assistance, communication with responders, accountability, family information and longer-term physical and psychological recovery.

Care begins when the area is reasonably safe enough to help

- call 911 or relay accurate location/condition information when safe;
- provide first aid or bleeding-control care within training and available resources;
- reassure frightened students and adults without making promises that cannot be guaranteed;
- help people maintain quiet/protective posture if the threat remains unresolved;
- communicate access, mobility or medical needs to responders;
- preserve accountability information as groups move or self-evacuate;
- avoid returning toward danger solely to retrieve belongings or find the normal group.

Care capability and equipment

Care should be planned as a distributed capability. Depending on local program and training, that can include basic first aid, CPR/AED, bleeding control and Stop the Bleed-type skills, trauma/bleeding-control kits, gloves and other immediately usable supplies. A district should know who is trained, where equipment is located, how it is replenished, and whether those resources remain reachable when a hallway, nurse's office or normal AED location is inside the threat area.

The objective is not to turn students or educators into tactical medics. It is to make reasonable lifesaving care possible once the immediate area is safe enough to help. Staff and appropriately trained older students may be able to call 911, apply direct pressure, use a tourniquet they are trained to use, retrieve an AED without moving toward danger, reassure an injured person, or report casualty location. Rescue task force, warm-zone care and other integrated fire/EMS/law-enforcement models remain local public-safety decisions that should be coordinated and exercised before an event.

Mental-health care belongs in the same continuum. Psychological first aid, access to school mental-health professionals, family assistance, employee assistance, support for responders and staff, culturally and linguistically appropriate services, and long-term follow-up should be planned before the incident. The need does not end when the threat is stopped or the school reopens.

Accountability after self-evacuation

Options-based movement creates a predictable administrative challenge: successful evasion may scatter students and employees among multiple safer locations. The EOP should define how those people report they are safe, how the district validates information, how off-campus groups are supervised, how parents are informed, and how reunification occurs without drawing families into the emergency perimeter.

Reunification site readiness: the method needs infrastructure

The Standard Reunification Method (SRM) is a widely used and valuable framework for organizing accountable student/guardian reunification. [R44] No reunification method, however, can compensate for a site that cannot support the operation. A district should evaluate primary and alternate reunification locations before placing them in the EOP, and should revisit them after construction, enrollment growth, communications changes or changes in community access.

A viable site should be evaluated for population capacity; safe separation from the emergency perimeter; bus access and staging; parent vehicle queuing and traffic control; accessible entrances, restrooms and movement routes; weather shelter; lighting and emergency power; reliable radio, cellular and data connectivity; staff work and check-in/release areas; student holding space; medical and mental-health support; language/interpretation capability; security and law-enforcement access; media separation; food/water and extended-duration needs; and the ability to operate if the normal school network is unavailable.

Options-based protective action makes this even more important because survivors may arrive through multiple pathways. Some students may be transported by bus, some may arrive with staff from an off-campus safer location, some may already have been away from campus, some may be with law enforcement or at hospitals, and some may have self-evacuated. Reunification is therefore not simply a pickup location. It is an accountability, logistics, information, care and family-assistance operation.

Recovery is part of preparedness

Recovery planning should include family communication, staff support, student mental-health support, memorialization and return-to-school decisions, facility recovery, employee assistance, responder liaison, media strategy, records preservation and long-term follow-up. PREPaRE and federal EOP guidance place recovery within the preparedness cycle rather than treating it as an improvised afterthought. [R4] [R8]

Source / alignment notes: [R4] [R8] [P1] [P3]

CHAPTER 31 | Caring for the People Who Respond First

Long before formal responders reach every location, students and employees may already be living the emergency. Educators, custodians, office staff, coaches, nurses, transportation workers and security personnel may recognize danger and help when safe. The people who act first also need preparation, support, relief and care afterward.

In my school first-responder presentation, I described school employees as the people who may initially respond and then live with the aftermath. It identifies challenges including loss of trust, avoidance, increased workload, negative media, intrusive recollection, dread, sleep and health effects, hopelessness, mood changes, sensitivity to criticism and difficulty concentrating or remembering. [P3] Those experiences are not universal and are not diagnoses. They are a reminder that preparedness and after-action processes need to account for the human beings carrying the work.

A recovery-support culture should

- normalize access to support without labeling normal stress reactions as weakness;
- offer multiple support pathways - peers, family, supervisors, school mental-health professionals, employee-assistance resources, clergy or medical professionals as appropriate;
- avoid forcing detailed retelling before the person is ready;
- protect privacy while still providing operational debrief and after-action learning;
- watch workload and decision fatigue during the days and weeks after an event;
- include security, facilities, transportation, communications and other staff who may be overlooked by student-centered recovery systems;
- revisit support needs over time rather than treating recovery as a one-day intervention.

CARE IS A CAPABILITY

A strong emergency plan protects people during the event and supports them after the event. The people who helped others may need help too.

Source / alignment notes: [P3] [R8] [R4]

PART VII

Verification, Maintenance, and Continuous Improvement

Education, practical testing, correction and sustained ownership turn ideas into usable capability.

A practitioner journey through people, plans, systems and changing conditions

TRAINING WITHOUT TRAUMATIZING

Teach understanding. Practice capability. Avoid theatrical fear.

CHAPTER 32 | The Scenario-Conversation Model

A student can explain what to do when the normal exit is unsafe without being placed in a frightening simulation. Calm scenario conversations can build understanding and reveal assumptions. Explain the familiar default, introduce one manageable change, invite a reasoned decision, reinforce role boundaries and end by describing how adults and responders will help. Learning should build capability rather than fear.

Age / role	Example scenario prompt	Desired learning - not performance pressure
Young students	"If we are outside and your teacher says we need to move away from the school, what do we do?"	Stay with the group when possible, listen, move to safer place, do not return for belongings.
Upper elementary	"If you are in the hallway and the nearest adult says there is danger ahead, where is the nearest safer room?"	Move away from danger, enter nearby safer space, close/secure door with adult or if capable.
Middle school	"The normal exit is in the direction of a violent disturbance. What other route or safer space do you know?"	Route awareness and permission not to move toward obvious danger.
High school	"You are in an empty classroom when a lockdown message begins. What can you secure, how do you stay informed, and what would make you reconsider remaining?"	Door knowledge, protective-space use, changing fire/smoke conditions, communication/accountability.
Staff	"Lockdown is active and the fire alarm activates. No smoke is visible. What does your plan require? What building information is available?"	Direct local fire-alarm/active-threat rule, system knowledge, communication and reassessment.

Age / role	Example scenario prompt	Desired learning - not performance pressure
Safety team	"An exterior threat starts during dismissal while buses are loading. What happens in the first 60 seconds?"	Command, stop movement, vehicle redirection, exterior options, notification and accountability.

The National Academies recommends discussion-based practices among lower-harm approaches and strongly discourages deception and high-sensorial simulation for students. [R1] The U.S. Department of Education likewise emphasizes psychological well-being in drill planning. [R2] This supports an important distinction: people can think about difficult situations without being made to believe they are currently under attack.

TEACH THE WHAT AND WHY

A calm scenario asks the learner to solve a life-safety problem. It does not recreate the terror of the problem.

Source / alignment notes: [R1] [R2] [R6] [R7]

CHAPTER 33 | Drills, Education and Evaluation

Different learning questions require different preparation methods. Discussion develops understanding; teach-back checks meaning; walkthroughs test doors and routes; a tabletop tests authority and

coordination; a functional test validates communications and automation; an appropriately designed drill tests occupant action; and a joint exercise tests the complete handoff. Treating every objective as a student drill creates unnecessary risk and often produces poor learning.

Required learning outcomes for the fire-alarm/lockdown collision

- State the ordinary rule: absent a known or reasonably apparent violent threat, follow the adopted fire-evacuation procedure.
- State the competing-hazard rule: a fire alarm and its automatic outputs do not automatically cancel lockdown during a known violent threat.
- Recognize immediate local fire/smoke/heat/structural danger and move away from both hazards when remaining is unsafe.
- Distinguish automatic system output from a deliberate human-issued change and know the locally approved change/all-clear method.
- Use alternate routes, communicate location and become accountable after movement when the normal route or assembly area is unsafe.

Who must be prepared

Train all employees at onboarding, at least annually and after material procedure/system changes, including administrators, teachers, substitutes, part-time staff, custodians, food service, transportation, coaches, nurses, special education, IT/facilities, communications and after-hours personnel. Orient volunteers, contractors and visitors to the actions relevant to their role. Teach students with calm, developmentally appropriate language and individualized supports. Brief parents/caregivers on the rule, safeguards and reunification expectations.

Jointly orient and exercise law enforcement, fire/EMS, ECC/PSAP, emergency management, fire marshal/AHJ, alarm monitoring/supervising stations, facilities, mass-notification owners and relevant integrators/vendors. Each stakeholder should know what the building does automatically, what information it receives, what it may decide, whom it informs, and how the action is updated or cancelled.

Evidence of learning and readiness

Use teach-back, short scenario decisions, walkthrough observation, functional communication/automation tests and joint exercises. Verify delivery, comprehension and role performance across classrooms, common areas, exterior spaces, buses, after-hours operations, languages and access/functional needs. Record deficiencies, owner, due date, correction and retest. A sign-in sheet proves attendance; it does not prove understanding.

Right-size the method. The paper does not require a technology purchase. A small or rural district can build the essential capability with clear written authority, trained people, radios or manual messages, direct public-safety coordination and disciplined testing—provided the full handoff is reliable and the local code/AHJ requirements are met.

Method	Best use	Caution
Education / discussion	Explain concepts, terminology, “what if?” conditions, developmental understanding.	Keep language role- and age-appropriate; do not turn discussion into graphic storytelling.

Walkthrough	Learn routes, doors, safer spaces, alarms, exterior destinations, accessibility.	Avoid surprise conditions; focus on familiarity and observation.
Drill	Practice a specific protective function or capability.	Announce appropriately; avoid high-sensorial simulation/deception; provide supports.

Method	Best use	Caution
Tabletop	Test leadership, fire/law-enforcement coordination, competing hazards, communications, decisions.	Include the people who own the systems being discussed.
Functional / full-scale exercise	Test adult/agency coordination, command, systems, rescue/medical operations.	Student involvement should be carefully limited/avoided as appropriate; professional exercise control required.
After-action review	Identify strengths, gaps, unexpected behavior and corrective actions.	Do not let the report become a blame document; assign ownership and deadlines.

Evaluate more than compliance

- Could participants distinguish an automatic alarm/notification output from a deliberate human-issued change in protective action?
- Could doors be secured and could occupants still egress?
- Did exterior groups know what to do?
- Did students understand what to do when separated from adults?
- Could the system account for people who self-evacuated?
- Did fire alarm, access control, PA/MNS, district apps, monitoring/dispatch and other integrations behave as documented—and could command identify message origin, supersede automation and preserve the record?
- Were accessibility needs supported?
- Did any aspect of the drill create unnecessary distress?
- What surprised the team?
- What corrective action will be completed, by whom, and by when?

Source / alignment notes: [R1] [R2] [R3] [R5]

CHAPTER 34 | A Practical Implementation Roadmap

A district need not replace its existing emergency plan to improve capability. Start with one uncertainty: an exterior group, a delayed warning, an unreliable opening or a conflicting alarm. Bring the responsible partners together, verify the actual condition, correct the gap and retest the result.

Phase	Action	Deliverable
1. Convene	Bring school, fire, law enforcement, emergency management, facilities, mental health, accessibility, transportation and communications together.	Named multidisciplinary working group and decision owners.
2. Baseline	Collect current EOP/protocols, fire-alarm cause-and-effect, access-control logic, floor plans, drill materials, student/parent messaging and code/AHJ requirements.	Current-state packet and known gaps.
3. Walk	Physically walk classrooms, common areas, exterior zones, bus loops, athletics, portables and after-hours spaces.	Building-specific “what if?” map.
4. Decide	Establish direct local rules for recognition, initiation authority, student door use, exterior movement, fire alarm during violent threat, accountability and updates.	Approved protective-action decision framework.
5. Align systems	Verify doors, fire alarm, access control, PA/MNS, radio, network, HVAC, elevator and backup-power behavior.	System cause-and-effect / ownership matrix.

6. Educate	Create developmental staff/student/parent education using calm scenarios and role-appropriate language.	Training package and parent communication.
7. Exercise	Use adult tabletop first, then walkthroughs/drills appropriate to objective and population.	Exercise record and observations.
8. Correct	Assign corrective actions, deadlines and retest criteria.	Corrective-action register.
9. Sustain	Revisit after incidents, renovations, staffing changes, code updates and at least annually.	Annual review / proof-of-life record.

START SOMEWHERE PRACTICAL

If the team does nothing else initially, answer two questions: “What do people do if the fire alarm activates during a known violent threat?” and “What do people outside do if the threat is outside?” Then verify that the building and communications support the answers.

Source / alignment notes: [R4] [R5] [R17]

CHAPTER 35 | Exercise, Observe, Question, Improve

Preparedness is a continuing responsibility, not a certificate earned once. Conditions evolve as guidance changes, schools renovate, systems are updated, buses move, employees leave, students mature,

incidents occur and after-action learning accumulates. The operating model must therefore cover prevention, preparation, response, accountability, reunification, recovery, correction and retest as a continuing cycle.

EXERCISE -> OBSERVE -> QUESTION -> IMPROVE -> RETEST

After every meaningful exercise or event, ask

- What worked earlier or better than expected?
- What failed, was delayed or was misunderstood?
- What assumption did the exercise expose as wrong?
- What did students or front-line employees do that planners did not anticipate?
- Did any person take a protective action before the official message - and was that appropriate to the conditions?
- What happened to doors, alarms, access control and communications?
- What happened to people outside the building?
- Did accessibility or medical needs alter the expected action?
- Were people who self-evacuated successfully accounted for?
- What created unnecessary fear, confusion or distress?
- Which corrective actions require budget, policy, training, maintenance or public-safety coordination?
- Who owns each correction, and when will it be retested?

The Arapahoe post-incident review credited LPS’s pre-incident use of staff-initiated drills that required staff to determine appropriate actions from a scenario, while also recommending further improvements. [R11] The transferable lesson is not that one district’s drill model should be copied. It is that preparedness improves when people must think about the purpose of the action rather than merely wait for a script.

CULTURE OF IMPROVEMENT

The goal of after-action review is not to prove the plan was right. It is to make the next version of the plan more useful.

VERIFICATION / CONTINUOUS IMPROVEMENT

What Changed? What Still Works?

An inspection record, a completed work order and an updated EOP are different things. Protection depends on connecting them.

A classroom door was repaired last week. A network switch was replaced yesterday. The school added new wireless equipment during the summer. Each action may appear complete in a separate department's record. Yet a protective capability can still be weakened when the interaction between systems is not retested.

Recurring assessment should therefore operate at several scales. Facilities checks examine openings, hardware, lighting, physical routes, alarm interfaces and power. Technology checks examine coverage, location reporting, network and software dependencies, access permissions, supervised trouble indications and backups. Human checks examine whether staff and students understand their role-appropriate options, including what to do when the usual adult, route, announcement or device is unavailable.

These are not just separate department activities. When a change affects the way people would shelter, move, receive information, report location or obtain care, the EOP owner must know. The plan, training, responder information, maintenance records and verification evidence should then be reconciled.

> **Close the loop: Recognize the change. Identify the people and systems affected. Decide what must change. Teach it. Test it. Record what happened. Retest after correction.**

A practical process need not be elaborate. The critical distinction is between assuming that the system was restored and demonstrating the capability under appropriate controlled conditions. Tests must be safely coordinated so they do not produce unintended dispatch, disrupt required fire protection, endanger students or create frightening simulated emergencies.

The hardest question may be whether the organization is willing to reopen a finding that everyone believed was resolved. Responsible preparedness accepts that knowledge changes. It treats an unexpected result as information, not an embarrassment to be hidden. Verification beats assumption.

Source / alignment notes: [R11] [R1] [R5] [P1]

IMPLEMENTATION / CROSSWALK

Use this to enhance what the district already does

Bring these questions to your existing EOP, school safety team, fire and law-enforcement partners, student-services teams, and facilities operations.

EXISTING LEADING PRACTICE	OPTIONAL ENHANCEMENT QUESTION	VERIFICATION EVIDENCE
School climate, BTAM, reporting, prevention	Does the first concern reach appropriate humans and become a meaningful intervention?	Documented triage, owner, support and follow-up.
Adopted response procedures and drills	Can students/staff act on reasonably apparent danger before an announcement when safety requires?	Age/role-specific teach-back; calm exercise.
Run-Hide-Fight / SRP / local terminology	Do people understand shelter, movement, last-resort survival boundaries and care without learning a competing program?	Locally consistent terminology and training.
EOP communications and duress	Are warning pathways accessible, differentiated, supervised and sufficiently redundant for all populations?	End-to-end tests, trouble handling, alternate pathway proof.
Facilities / physical protection	Will the actual door, route, egress, power or control behave as expected?	Functional observations, work order and retest.
Exterior movement and reunification	Could one designated route or rally location create exposure? Are multiple feasible options assessed?	Walkthrough, current maps, safe accountability process.
Fire-alarm and active-threat planning	Are automatic alarm outputs distinct from locally authorized human changes and actual fire-danger observations?	Code/AHJ-approved cause-and-effect tests.

Implementation is local. Nothing here directs districts to override adopted code, change a required emergency signal, abandon a standard response protocol, install a specific device, or use the author's terminology. Verify with the people who own the affected capability.

Source / method: See OP01-OP16 and Appendices A-T; [S1], [S4], [S5].

CHAPTER 36 | Closing: Give People Something They Can Do

Schools cannot eliminate every danger, but they can strengthen prevention, physical protection, clear procedures and coordinated response. They can teach developmentally appropriate choices and verify that systems work. The goal is to leave people with a practiced starting point when the expected adult, warning, route or protective space is unavailable.

The goal is not to make children responsible for school security. It is to refuse to make helplessness the default. A student can know how a door works. A student can know not to move toward obvious danger. A student can understand that if they are outside, “lockdown” may not mean running back toward the building. A student can know where to go after moving away. Adults can know that a fire alarm during an active threat is a condition to manage, not a reason to stop thinking. Staff can know they are permitted to act on immediate danger before perfect information arrives.

That preparation can be taught calmly. It can be transparent to parents. It can be reviewed by school psychologists and mental-health professionals. It can respect developmental differences, disability, fire code, public-safety authority and the limits of available evidence. Directness and care are not opposites.

FINAL PRACTITIONER POSITION

Recognize. Understand. Protect. Adapt. Communicate. Account. Care. These are not a new branded program. They are human capabilities a good emergency system should support.

The most important question is not whether everyone memorized the same words. It is whether the people in the school have enough appropriate knowledge, environmental support and practiced understanding to move toward safety when the real conditions are different from the expected ones.

PREPAREDNESS SHOULD LEAVE PEOPLE MORE CAPABLE - NOT MORE AFRAID.

Source / alignment notes: Perspective synthesis informed by [R1]-[R18] and [P1]-[P4].

PART VIII

Historical Research, Practitioner Tools, and References

Detailed incident evidence, technical practices, discussion tools, references and source distinctions.

PRACTITIONER TOOLS AND CLOSING

Turn the philosophy into questions, checklists and local decisions.

CHAPTER 37 | How to Use the Practitioner Tools

The appendices are working tools, not universal policy language. Use them to ask better questions, document decisions and verify real protective capabilities. Adapt each tool to local law, adopted codes, the district EOP, building conditions, public-safety arrangements, student needs and community expectations.

Recommended sequence

1. Use Appendix A to brief the multidisciplinary team on the documented ways fire alarms and violent events have intersected. Focus on patterns, not graphic incident detail.

2. Use Appendix B to establish developmental boundaries before writing student-facing content.

3. Use Appendix C with fire, law enforcement, facilities, emergency management and the AHJ to develop the local fire-alarm/active-threat procedure.

4. Use Appendix D to walk exterior zones at every school and establish movement, safer locations and accountability.

5. Use Appendix E to examine competing hazards and alarm collisions beyond fire alarm alone.

6. Use Appendix F to test every major protective action for disability, access and functional needs.

7. Use Appendices G-I to develop transparent family communication, staff scenario conversations and developmentally appropriate student education.

8. Use Appendix J to verify the building systems that support or change protective actions.

9. Use Appendix K after tabletop exercises, drills and real events to assign corrective actions.

10. Use Appendix L during annual review to prevent the plan from becoming stale.

A school should resist the temptation to turn the tools into a compliance checklist completed once per year. Their value is the conversation they produce. If a question exposes disagreement, walk the space, consult the appropriate expert, make a decision, document it, teach it and test it.

Source / alignment notes: All appendices synthesize practitioner recommendations with [R1]-[R18] and [P1]-[P4].

OPERATIONAL PRACTICE OP01

Put the capability into the EOP

This work carries lived experience and documented incident learning into shared responsibility for protecting life. Use the emergency operations plan (EOP) to turn each lesson into an assigned, resourced and practiced capability. Preserve the original lesson and its conditions while recording the local decision.

Local planning outputs

Basic plan	Record decision authority, school/district succession, public-safety coordination and how essential functions continue when the affected school cannot lead.
Functional annexes	Place communications, accountability, reunification, medical/access support, public information and continuity arrangements in the relevant annexes. Cross-reference building-specific procedures.
Hazard-specific procedures	State the default, immediate-danger exception, authority to change action, automated system effects and safe investigation boundaries for competing hazards.
Adoption and availability	Assign approval, issue date, owner, alternate, training and revision triggers. Keep approved role instructions available when the normal network or office is unavailable.

Owner and alternate

District emergency-management lead coordinates; each department owns its function. Designate an alternate for each role and a public-safety liaison. Students retain age-appropriate protective options without security assignments.

When the normal arrangement fails

If an assumption fails, use the documented alternative and report the capability gap through command. An EOP stored only behind a failed login is unavailable when needed.

Exercise and evidence

Choose one lesson and have school, fire/EMS, law enforcement, dispatch, facilities, IT and student-services representatives locate the same approved procedure and explain their handoffs.

Master path: Chs. 03–04, 10, 13, 15–16, 34–35; Appendices O and S. Source alignment: S1, S2.

OPERATIONAL PRACTICE OP02

Prove what the building actually does

The protective decision and the building response must support each other. Extend the existing cause-and-effect record to show actual physical behavior, human authority and the alternative when a function fails.

Local planning outputs

Opening and route	Record normal, lockdown, alarm, power-loss and network-loss states for relevant doors and gates. Verify latch/lock position, occupied-side operation, free egress and approved responder access.
Connected systems	Record alarm inputs, PA/voice outputs, monitoring transmissions, elevators, HVAC and smoke-control effects with qualified owners and the authority having jurisdiction (AHJ).
Emergency power	Identify the loads actually supported, transfer behavior, expected duration, battery/charger condition and who receives trouble indications.
Human control	Name who may issue or change messages and who has approved authority for system controls. Record how occupants learn that a deliberate protective-action change occurred.

Owner and alternate

Facilities and safety lead the record; qualified fire/life-safety, access-control, IT and communications personnel verify their portions with public-safety/AHJ coordination.

When the normal arrangement fails

A remote command is not proof of a secured opening. Record the approved operating alternative for a failed door, controller, network or power source while preserving egress and fire protection.

Exercise and evidence

Conduct a planned, controlled functional test with relevant owners. Compare observed states and delivered messages with the written sequence; document discrepancies and retest after correction.

Master path: Chs. 14–16, 24, 29; Appendices J, M and S. Source alignment: R9, R17, S2.

OPERATIONAL PRACTICE OP03

Plan for the actual time and setting

Protective action must work during the school day, transitions and community use. Complete one operating-mode record for each setting whose people, supervision, routes or communications differ.

Local planning outputs

Day and transition	Identify exterior groups, portables, open-campus students and loading/unloading populations. Name who can stop inbound movement and communicate safer destinations.
Transportation	Record drivers and accessible vehicles actually available by time of day, dispatch coverage, passenger information, alternate loading sites and mobilization arrangements.
Events and shared use	Assign an event lead and alternate for athletics, rentals, contractors and visiting groups. Provide usable instructions to people without school accounts or radios.
Off-site activity	For field trips and other school-supervised off-site programs, confirm host coordination, emergency contacts, accessible movement, supervision, transport and reporting to the district.

Owner and alternate

Transportation and program/event leads own their modes with school command. Confirm support from communications, nursing/accessibility, facilities and community partners before use.

When the normal arrangement fails

If the campus, usual route or assigned site is unavailable, use a locally evaluated alternative. Keep already-safe people away from danger and reconcile their locations through the accountability process.

Exercise and evidence

Tabletop a dismissal incident and an evening event separately. Demonstrate who reaches drivers, visitors and exterior groups, and how the district accounts for them after movement.

Master path: Chs. 15, 21–23, 30; Appendices D, O and R. Source alignment: S1, S6.

OPERATIONAL PRACTICE OP04

Separate coverage, capacity and priority

Cellular service, school Wi-Fi, public-safety broadband and land-mobile radio (LMR) have different operating dependencies. Record the actual device, service, user and location supporting each critical message.

Local planning outputs

Coverage	Test transmit and receive functions in occupied rooms, stairs, basements, exterior areas, buses and proposed reunification sites using the devices and services people will carry.
Capacity and applications	Document congestion assumptions, battery state, login/app availability, location accuracy and whether messages can be received when the user cannot interact normally.
Priority services	Verify eligibility, enrollment and user procedures. CISA WPS prioritizes eligible cellular calls; it does not preempt calls already in progress. Do not assume it prioritizes every app or device.
Public-safety coordination	FirstNet provides public-safety priority and preemption features. Confirm the actual service arrangements with responders and continue to plan locally required radio interoperability and coverage.

Owner and alternate

Communications/IT, transportation and safety coordinate with dispatch, responding agencies and service providers. Keep an alternate custodian for the service and device records.

When the normal arrangement fails

Priority cannot substitute for a working device and usable connection. A radio enhancement system and a commercial cellular system must each be evaluated for the function they are intended to support.

Exercise and evidence

Use approved coverage checks and simulated loss of the primary path, without interfering with public networks. Record message receipt, intelligibility and the alternative used at each location.

Master path: Ch. 13 and its communications sections; Appendices P and R. Source alignment: R28, R30, R43, S4, S5.

OPERATIONAL PRACTICE OP05

Make PACE usable by both ends

Primary, Alternate, Contingency and Emergency (PACE) planning starts with a communication task: who needs to reach whom, with what information and acknowledgement. Complete Appendix P for each essential task.

Local planning outputs

Methods and triggers	Name the four locally feasible methods and the observable trigger for switching. Record who initiates the switch and how the receiving party knows where to listen.
Independent dependencies	Identify power, carrier, backhaul, school network, cloud, identity/login and staffing dependencies. An app and email on the same failed connection do not provide independent alternatives.
Receiving capability	Confirm that substitutes, exterior groups, after-hours users, dispatch and partner agencies can receive the chosen method. Include language and access supports.
Operating endurance	Record batteries, charging, staffing relief, spare devices, contact lists and availability of instructions without the normal network.

Owner and alternate

Communications lead develops the plan with sending and receiving users. Public-safety interoperability methods and radio use require the agencies responsible for those systems.

When the normal arrangement fails

Use the next proven method when the trigger occurs. If no safe and feasible path remains, escalate that gap for a local operating decision. Do not send a person through a threat area merely to carry a message.

Exercise and evidence

During an adult exercise, remove one dependency at a time. Have both ends change methods and acknowledge the same message. Record shared failures and repeat after correction.

Master path: Ch. 13; Appendices J, P and R. Source alignment: S3.

OPERATIONAL PRACTICE OP06

Treat cyber disruption as a safety condition

Cybersecurity and emergency operations need a shared picture of which protective capabilities depend on networks, cloud services, credentials and vendor access. A cyber event may also occur during a physical emergency.

Local planning outputs

Critical dependencies	Identify access control, duress, video, notification, telephony, mapping, transport, rosters and care/reunification records. Record local operation and what disappears when each dependency is lost.
Access and protection	Assign least-privilege access, multifactor authentication where supported, controlled vendor access, patch/change processes, logging and protection of sensitive safety information.
Coordinated isolation	Pre-plan how IT containment decisions reach safety, facilities and command. Evaluate life-safety effects and put approved alternatives in place; avoid uncoordinated shutdown or reconnection of critical services.
Restoration	Maintain protected, tested backups and offline essential records. Define restoration priorities and verify safe system behavior, permissions and message/configuration integrity before resuming reliance.

Owner and alternate

IT/cyber lead and emergency-management lead jointly connect the cyber incident response plan to the EOP. Name decision alternates and vendor contacts available outside the affected account system.

When the normal arrangement fails

Use approved independent communications, physical protection and manual accountability while technical staff address the disruption. Report whether information or automation is unavailable or cannot be trusted.

Exercise and evidence

Tabletop a ransomware-related network isolation during a protective action. Require a safe continuity decision, an independent command contact and evidence for restoring each critical capability.

Master path: Chs. 03–04, 13, 15–16, 34–35; Appendices O, P, R and S. Source alignment: S7, S8.

OPERATIONAL PRACTICE OP07

Make digital maps usable on arrival

A shared map must connect a reported location to a place responders can identify. Pair digital mapping with consistent physical identifiers, a known update owner and an available fallback.

Local planning outputs

Common identifiers	Align building, floor, room, exterior-door, gate, camera and alarm-zone names. Include portables and exterior activity areas. Explain any old or alternate names that remain in use.
Useful information	Coordinate the needed entrances, routes, utilities, alarm controls, fire-protection features, medical resources and accessible locations with responders. Keep changing occupancy information time-stamped and distinct from the base map.
Availability and protection	Confirm dispatch, responding agencies and mutual aid can retrieve the appropriate version in their workflows. Provide controlled offline/printed access; restrict sensitive details and personal information to authorized roles.
Update responsibility	Record the map owner, alternate, version and change triggers. Verify construction, room changes, new gates, relocated equipment and changed identifiers before replacing the approved map.

Owner and alternate

Facilities owns physical accuracy with safety/GIS support; dispatch and responders validate usability. IT controls authorized distribution. Nursing/accessibility staff govern appropriate sharing of individual support information.

When the normal arrangement fails

If digital access fails, use the controlled offline or printed version and plain-language location confirmation. Identify outdated information explicitly and reconcile it with observed conditions.

Exercise and evidence

With dispatch and an unfamiliar authorized responder, trace a hypothetical room or exterior report to the same map, physical identifier and approved approach. Record mismatches and retest.

Master path: Chs. 14–16; Appendices J and Q. Source alignment: S1.

OPERATIONAL PRACTICE OP08

Verify the full responder-access process

Responder access begins before a vehicle reaches the school and continues to the secured room or critical system. Plan approved access with law enforcement, fire/EMS and facilities, including after-hours and mutual-aid conditions.

Local planning outputs

Campus and building	Identify controlled approaches, gates, exterior doors and approved access arrangements. Confirm the information dispatch can provide without relying on one employee being present.
Secured spaces	Verify the appropriate keys, credentials or other locally approved emergency-entry methods for occupied rooms and critical areas. Include construction changes and doors using different hardware.
Control and accountability	Assign secure custody, issue/revocation, authorized use and periodic checks of access resources. Keep sensitive access details in controlled local records.
Coordination	Agree how responders receive current maps and location information, how school command connects with responding command, and how occupants receive the locally approved release instruction.

Owner and alternate

Facilities/access-control lead and school safety coordinate with each responding discipline. Name an alternate and confirm dispatch and mutual-aid arrangements with the responsible agencies.

When the normal arrangement fails

Pre-plan approved access during power, network, credential-system or staff unavailability. Preserve occupied-side egress and avoid blanket unlocking that undermines protected spaces. Responder entry tactics remain agency decisions.

Exercise and evidence

Conduct an authorized walkthrough from the campus boundary to selected secured spaces. Test the actual approved access resources and fallback, including an after-hours case and an outdated-credential finding.

Master path: Chs. 04, 09, 14–16; Appendices J and Q. Source alignment: R9, S1.

OPERATIONAL PRACTICE OP09

Close the alert-to-action handoffs

A received alert must produce the intended response. Record the handoff from recognition or activation to acknowledgement, appropriate dispatch, protective action, updates, accountability and correction.

Local planning outputs

Meaning and location	Distinguish assistance, medical, violent-threat and sensor events. Provide useful identity/location and indicate information age or confidence when relevant.
Receiver and escalation	Name the staffed receiving role and alternate, acknowledgement method and locally agreed escalation trigger. Define what occurs if the person activating cannot speak or no acknowledgement returns.
School and public safety	Agree who notifies emergency communications, what is transmitted and what action begins without further verification. Do not insert a routine confirmation delay into immediate self-protection.
Update and cancellation	Name who may change the action. Track which recipients and automated outputs need an update or cancellation, and preserve the incident record.

Owner and alternate

Safety and communications owners align school, dispatch, monitoring and vendor responsibilities. Every handoff has a named receiving function and backup, including after-hours coverage.

When the normal arrangement fails

When a monitoring platform or acknowledgement path fails, use the approved independent emergency contact method. Treat lack of acknowledgement as an unresolved handoff, not evidence that assistance is coming.

Exercise and evidence

Test an activation, a wrong-location report, an absent receiver and a cancellation. Verify the intended recipients and actions without unintended live emergency dispatch; coordinate test controls in advance.

Master path: Chs. 10, 13, 15; Appendices N, O and R. Source alignment: S1, S2.

OPERATIONAL PRACTICE OP10

Keep authority and command connected

People may need immediate protection before command has a complete picture. The EOP should preserve that capability while defining how school, district and public-safety leadership coordinate changing conditions.

Local planning outputs

Initiate	State which roles can initiate each protective action and how direct recognition is reported. Give substitutes and after-hours leaders clear instructions and limits.
Continue command	Name role-based succession, alternate locations and communications. Provide district support when school leaders are sheltering, injured, isolated or unable to manage operations.
Transfer and coordinate	Use a handoff covering known hazards, protective actions, missing information, people/locations, access, system failures, resources and pending decisions. Confirm who has received responsibility.
Change and release	Define authorized human decision-makers, public-safety coordination and how updates reach affected groups. Address stale, automated or conflicting messages and the locally approved release method.

Owner and alternate

School and district leadership maintain succession; the designated liaison connects with public-safety command. Department leads continue assigned transport, care, accountability, information and logistics functions.

When the normal arrangement fails

If the expected leader or command location is unavailable, activate documented succession and alternate communications. Occupants continue to respond to immediate local danger within their trained protective boundaries.

Exercise and evidence

Use a tabletop in which two leaders are unavailable and the primary command location cannot be used. Require an explicit handoff, a coordinated update and confirmation to exterior and off-site groups.

Master path: Chs. 03–04, 10, 13, 15–16; Appendices O and R. Source alignment: S1, S2.

OPERATIONAL PRACTICE OP11

Carry access needs through every step

An accessible plan connects notification, protection, movement, assistance, accountability, care and reunification. Test it against actual people and settings with appropriate individual and family participation.

Local planning outputs

Receive and understand	Provide suitable audible, visual, language and communication supports. Check the alternative when the primary device, interpreter or familiar adult is absent.
Protect and move	Evaluate the actual door, room, route, exterior destination and transportation. Plan assistance and backup assistance consistent with individual needs and approved procedures.
Sustain support	Address time-sensitive medication, medical devices, mobility aids, service animals, sensory needs and accessible care during prolonged protection or relocation.
Share and update	Keep necessary support information current and available to authorized helpers and responders. Minimize unnecessary disclosure and update arrangements when people, schedules or needs change.

Owner and alternate

Student services, nursing, accessibility/special-education personnel and emergency planning share responsibility with the individual, family and relevant staff. Include employees and visitors; identify trained alternates.

When the normal arrangement fails

If the usual helper, route, vehicle or communication support is unavailable, use the preplanned alternative and communicate the unmet need. Do not substitute an untested generic instruction for individual planning.

Exercise and evidence

Use a calm walkthrough with the usual assistant unavailable. Verify message understanding, usable protection/movement, alternate support and continuity through reunification; correct barriers with the affected participants.

Master path: Chs. 07–09, 11–12, 30, 33; Appendices B, F and O. Source alignment: S1, S6.

OPERATIONAL PRACTICE OP12

Account for people and inform families

Protective movement can leave people safe in several places. Accountability needs one reconciliation process that can accept partial information while family assistance continues.

Local planning outputs

Status and reconciliation	Define consistent categories such as located safe, reported but unverified, transported and not yet located. Record source, time, location, last known information and the next verification task.
Different populations	Include students, staff, substitutes, visitors, contractors, buses, off-campus programs and people at hospitals. Reconcile duplicate or conflicting reports without requiring return toward danger.
Family information	Name the public-information lead and alternate. Pre-plan accessible, multilingual updates, safe contact methods, rumor correction and how families learn where and when reunification will occur.
Release and sites	Verify primary/alternate site capacity, accessible transport, communications and care. Follow approved identity/authorization checks, document release and plan a controlled manual process when electronic records fail.

Owner and alternate

Accountability and reunification leads reconcile records; public information coordinates family updates with command. Nursing/student services support individual needs and hospital/family-assistance liaison.

When the normal arrangement fails

Use protected offline records, locally approved manual forms and independent communication when normal applications fail. Flag unverified information clearly and assign follow-up; never equate a delayed check-in with confirmed injury.

Exercise and evidence

Tabletop students at three safe locations, a bus diversion, an unavailable roster and an unusable reunification site. Demonstrate reconciliation, authorized release and a family update that states what is known and when another update will follow.

Master path: Chs. 11, 22–23, 30; Appendices G, O and R. Source alignment: S1, S6.

OPERATIONAL PRACTICE OP13

Plan care through the long aftermath

Care begins as soon as it can be provided without creating additional exposure and continues after reopening. Connect physical care, family assistance, employee support and the continuity of essential school services.

Local planning outputs

Reachable capability	Locate trained personnel and usable first-aid/AED/bleeding-control resources. Check access when the nurse office, usual hallway or supply location is unavailable; coordinate medical response with EMS.
Prolonged conditions	Plan staffing relief, accessible shelter, water, sanitation, weather protection, charging and time-sensitive support. Assign logistics requests through command.
Recovery support	Identify school and community support pathways, family-assistance contacts and follow-up responsibilities. Include custodial, transport, security, communications and other staff who may be overlooked.
Continuity and return	Pre-plan alternate service/learning locations, essential records, meal/transport supports, facility review and return-to-school decisions with the responsible disciplines.

Owner and alternate

Nursing/EMS partners guide medical planning; mental-health and student-services leads organize support. Operations and district leadership resource continuity, relief and recovery with named alternates.

When the normal arrangement fails

If care resources or support providers are unavailable, request the identified partner or alternate resource through command. Protect privacy and offer support without compulsory detailed retelling of the incident.

Exercise and evidence

Continue an adult tabletop beyond threat resolution: account for people, open family assistance, relieve exhausted staff, identify the next-day service plan and assign longer-term follow-up.

Master path: Chs. 30–31, 35; Appendices F, G and O. Source alignment: S1, S6.

OPERATIONAL PRACTICE OP14

Teach roles and verify understanding

Role knowledge must survive turnover, a changed schedule and an unavailable familiar adult. Use the existing developmental guidance to teach what people can do, where their responsibilities end and how they obtain help.

Local planning outputs

Before assignment	Give staff, substitutes, contractors, volunteers and event leaders the local actions, door/route orientation, notification methods and reporting contacts relevant to their roles.
Student learning	Use calm explanation, familiar language and individualized supports. Ask students to explain safer options when separated or when conditions change; preserve the boundary against security assignments.
Partner learning	Have dispatch, responders, school command, facilities, IT, transportation and care leads explain the same scenario and the handoff they expect from the next role.
Evidence and feedback	Use teach-back, walkthroughs and appropriately controlled exercises. Record misunderstandings, barriers and participant feedback, then reteach and retest.

Owner and alternate

Education/training leads work with safety, school psychology, accessibility, families and frontline personnel. Department supervisors ensure alternates and new personnel receive the required orientation.

When the normal arrangement fails

If a person cannot explain or perform the expected action, provide an accessible aid, assistance or revised instruction before relying on that capability. Keep the learning environment calm and supportive.

Exercise and evidence

Ask a substitute, driver, custodian and developmentally appropriate student group to explain one changed-condition scenario separately. Compare the answers for contradictions and missing handoffs, not for blame.

Master path: Chs. 05–09, 11, 32–33; Appendices B, H, I and R. Source alignment: R1, R2, S2.

OPERATIONAL PRACTICE OP15

Keep the capability working after change

Preparedness requires continuing ownership. Extend the existing corrective-action register to cover configuration changes, maintenance, training, resources and verification after repair.

Local planning outputs

Owner and resources	Name the accountable owner, alternate, maintenance/support contact, recurring cost and needed spare or replacement resources for each critical capability.
Change control	Assess the effects of construction, room renaming, new hardware/software, credential changes, vendor transitions and staffing changes before use. Update maps, instructions and affected partner information together.
Interim protection	When a deficiency is found, record its operational consequence, approved temporary measure, decision authority, due date and escalation if it remains unresolved.
Close with evidence	Keep observations, corrective work, retraining and end-to-end retest results. A completed work order or purchased replacement does not alone demonstrate restored capability.

Owner and alternate

Each functional owner maintains the record; safety coordinates cross-system effects. Leadership resolves resources and unresolved risk. Include vendors and public-safety/AHJ partners when their systems or responsibilities change.

When the normal arrangement fails

If the approved temporary measure cannot support the protective objective, escalate promptly for an operating decision. Keep affected staff informed of the current limitation and the usable alternative.

Exercise and evidence

Sample one recent room change, software update and staff departure. Verify that maps, access, messages, role instructions, contacts and tests all reflect the change. Use Appendix S to close any gap.

Master path: Chs. 15, 34–35; Appendices K, M and S. Source alignment: S2, S8.

OPERATIONAL PRACTICE OP16

Prepare alternatives beyond communications

An alternate plan should identify a changed condition, a workable response and the person authorized to activate it. Use the same discipline for routes, sites, people, records, care and logistics.

Local planning outputs

People and places	Name succession and alternate command, shelter, loading and reunification locations. Evaluate capacity, accessibility, hazards, communications and availability with the responsible partners.
Resources and agreements	Confirm drivers, vehicles, care supplies, interpreters, support staff, records and partner arrangements. Record mobilization time and how requests are made outside normal hours.
Triggers and coordination	State what makes the primary arrangement unusable and who activates the alternative. Include notification to those already moving or acting under the previous direction.
Common failures	Check whether primary and alternate sites, systems or suppliers can be affected by the same outage, perimeter, weather event or staffing shortage. Record a further option when needed.

Owner and alternate

The EOP owner coordinates; each function owns its alternatives and handoffs. Partners confirm the resources and authority they can actually provide. Plan for small and rural districts using available regional arrangements.

When the normal arrangement fails

When several assumptions fail together, use the agreed priority of protecting life, establishing command contact, locating people and obtaining needed care/resources. Report limits; do not send people to an unverified destination.

Exercise and evidence

Use the worked exercises in Appendix R. Introduce one failure, then a second shared dependency, and require participants to activate and communicate the next feasible arrangement.

Master path: Chs. 03–04, 13, 15, 21–24, 30, 34–35; Appendices O, P and R. Source alignment: S1, S2, S6.

APPENDIX A | Documented Fire-Alarm / Active-Threat Incident Review

Scope note: This appendix is an intentionally broad practitioner review of documented U.S. K-12 violent incidents and selected thwarted plots in which a fire alarm, manual pull station, fire drill/evacuation, smoke, incendiary device, explosion/fire condition, or fire-system interaction materially affected the event or the response. It is not represented as a complete national census because no authoritative national database consistently codes these variables. The method is to include every case identified in this review that can be supported by an official record, primary agency source, court record, credible contemporaneous reporting, or a clearly labeled practitioner source; uncertain facts are labeled rather than filled in by inference.

Incident	Fire / alarm / evacuation interaction	Why it matters / confidence
Olean High School, NY - 1974	During winter break, the attacker set a gasoline fire/firebomb condition and an alarm drew custodial/fire response into the incident environment. Firefighters were among those shot/injured.	Confirmed fire/violent-event interaction. Demonstrates that a fire alarm can draw school staff and responders toward an armed threat; alarm calls require situational correlation. [R14][R38]
Cokeville Elementary School, WY - 1986	A school hostage event included an improvised gasoline bomb. The device exploded during the hostage situation, creating fire, smoke, burns and immediate escape/medical needs while the violent threat still existed. A fire-alarm role is not established in the sources reviewed.	Confirmed concurrent violent, explosive and fire conditions. Demonstrates why lockdown/hostage planning cannot assume the building environment will remain tenable and why medical/fire response may be simultaneous. [R39]
Westside Middle School, AR - 1998	One attacker deliberately pulled the fire alarm and returned outside to the ambush position. Students and teachers evacuated into gunfire.	Confirmed deliberate pull-station use as part of the attack. Strongest K-12 example of a fire alarm being used to create predictable movement. [R13]
Columbine High School, CO - 1999	Smoke from incendiary devices triggered the school fire-alarm system early in the attack. The alarm remained active for hours and contributed to extreme noise, smoke/water conditions and responder communication/movement difficulty.	Confirmed fire-system activation and responder impact. Shows that alarm noise and building effects can persist well after the immediate shooting and complicate command, search and evacuation. [R12]
Carver High School, NC - 2013	A student shooting occurred outside as students were returning at the end of a scheduled fire drill.	Confirmed attack during a planned evacuation transition. Shows predictable mass movement/congregation can create exposure even when the alarm is not attacker-initiated. [R20]
Arapahoe High School, CO - 2013	The attacker carried Molotov cocktails and ignited one in the library. Investigative witness records document the fire alarm sounding after gunfire/lockdown while announcements instructed occupants to remain in place.	Confirmed concurrent alarm and lockdown condition. Shows why occupants may need to retain protection from known violence while remaining alert for actual fire/smoke that changes tenability. [R11][P1]
Marysville-Pilchuck High School, WA - 2014	The fire alarm sounded immediately after the cafeteria shooting began. Investigation interviews document someone yelling to pull the alarm and witnesses believed a student may have done so. Students in parts of the school began evacuating before being redirected toward lockdown/shelter.	Confirmed alarm occurrence; manual activation is strongly supported but the exact activator may not be conclusively established in every record. Shows how a well-intended warning can create conflicting protective movement. [R15]
Jeremiah E. Burke High School, MA - 2016	A fire alarm caused students to evacuate. A shooting occurred near the school shortly after the evacuation, killing one student and wounding others.	Confirmed fire-evacuation exposure from appellate factual record. Not an interior active-shooter alarm case, but important for assembly-area and post-evacuation vulnerability. [R19]
Aztec High School, NM - 2017	During the active shooting, a fire alarm sounded. Investigative records document radio traffic advising there was no fire and telling occupants to stay in classrooms.	Confirmed alarm/lockdown conflict; exact initiating cause is not established in the cited excerpt. Demonstrates the need for a clear competing-hazard rule and rapid schoolwide message. [R36]
Marjory Stoneman Douglas High School, FL - 2018	Official commission findings established that no manual pull station was activated; gunfire-related muzzle flash, smoke and/or displaced dust activated the system. The fire alarm contributed to movement/confusion during the attack.	Confirmed automatic activation caused by attack effects. Corrects the persistent myth that the attacker deliberately pulled the alarm. [R16]
Santa Fe High School, TX - 2018	Witness reporting indicates a teacher pulled the fire alarm after the shooting began because normal communication was unavailable, apparently to warn the school. Occupants elsewhere began evacuating.	Manual activation as warning is supported by contemporaneous witness reporting; official source details are more limited in this review. Shows the danger of using a fire-evacuation signal as a substitute for an active-threat message. [R21]

Incident	Fire / alarm / evacuation interaction	Why it matters / confidence
Central Visual and Performing Arts High School, MO - 2022	Police-investigative witness statements document the fire alarm sounding during the attack. Some occupants remained secured because the intruder alert had already been announced and no all-clear had occurred. The exact cause of the fire-alarm activation was not established in the material reviewed.	Confirmed alarm occurrence; cause uncertain. Demonstrates the value of maintaining the active-threat protective posture when the alarm source is unknown and immediate violent-threat information is stronger. [R22]
The Covenant School, TN - 2023	The investigative record documents gunfire/smoke conditions that activated the fire alarm, prompting normal fire-evacuation behavior in portions of the school while the attacker was moving through the building. Fire-system/access-control behavior also became part of the operating picture.	Confirmed attack-generated fire-alarm activation. Strong modern example of individually functioning systems producing dangerous combined movement when the competing-hazard condition was not immediately understood. [R18]

Selected thwarted / near-miss planning cases

Completed incidents are not the only evidence that adversaries may understand fire-evacuation behavior. In 1998, shortly after Jonesboro, authorities in St. Charles County, Missouri reported that three sixth-grade students at Becky-David Elementary School had planned a sniper-style attack during a false fire alarm, explicitly modeled on Jonesboro. The plot was discovered before it could be carried out. [R35] Thwarted plots should not be mixed statistically with completed attacks, but they are relevant to the planning question because they demonstrate that the vulnerability of predictable evacuation has been recognized by would-be attackers.

Other thwarted school-violence cases involving explosives or study of emergency procedures may also be relevant to broader competing-hazard planning, but this appendix does not include them in the main fire-alarm table unless the reviewed source specifically establishes a fire-alarm, fire-evacuation or fire-condition component. That evidentiary discipline is important: a useful warning loses credibility if the historical record is exaggerated.

Patterns practitioners should take from the record

- Deliberate alarm activation by an attacker is historically documented.
- Automatic alarm activation caused by fire, incendiary effects, smoke or attack activity is historically documented.
- Well-intended manual activation by a person trying to warn others is reported in documented incidents.
- Fire drill/evacuation transitions can create predictable exterior congregation and exposure.
- An alarm can sound after occupants are already in a lockdown/protective posture.
- Alarm noise, smoke and water can materially affect responder communication and movement.
- The cause of an alarm may remain unknown in the first minute; the procedure must still provide a safe default.
- A historical incident should not be used to claim one universal tactic. The pattern supports a local, code-compliant, multidisciplinary procedure.

CURRENT POLICY EXAMPLE: TENNESSEE

Public Chapter 563 requires covered Tennessee schools to develop a procedure for determining the cause of fire-alarm activation, including the potential for an active-shooter event, in consultation with local fire and law enforcement and in compliance with applicable codes. State guidance discusses designated investigation, staff training and incorporation into EOPs. This is a state-specific example, not a national rule. [R17]

A second operational pattern is responder exposure. A routine automatic fire-alarm dispatch can place fire/EMS resources on approach to a school before violent-threat information is fully correlated. The dispatch and unified-command system should therefore be capable of merging alarm, 911, duress, sensor and school reports quickly enough that responding fire/EMS units understand the threat environment before committing to the building.

A third pattern is historical misinformation. Parkland is the clearest example: the widely repeated claim that the attacker pulled the fire alarm is contradicted by the official commission record. This paper treats incident cause separately from incident effect and labels uncertainty when the initiating device or person cannot be established.

Source / alignment notes: Incident source set: [R11]-[R24], [R35]-[R39], and [P1] where explicitly labeled as practitioner context.

APPENDIX B | Developmental Preparedness Matrix

This matrix is a practitioner adaptation informed by Safe and Sound Schools' Developmental Levels of Safety Awareness and the broader trauma-informed/developmentally appropriate guidance reviewed for this project. It is not a clinical instrument and should not replace individualized assessment, special-education/504 planning, parent input or mental-health expertise. [R1] [R2] [R6]

Band	Can learn	Can practice calmly	Avoid / do not expect
Early / Pre-K-K	Trusted adults; simple alert meaning; move to safer place; stay with group; quiet/listen; ask for help.	Short walk to safer place; closing door with adult; simple "what if we need another route?" conversation.	Graphic detail, deceptive drills, independent threat-location decisions, confrontation.
Developing / early elementary	Basic alerts; nearby safer spaces; move away from obvious danger; simple reporting; reunification basics.	Walk alternate exits; identify trusted adults; close/secure room with adult; simple outside-to-safer-place practice.	Responsibility for protecting group, high-intensity simulation, complex tactical language.
Practiced / upper elementary	Assist with simple emergency actions; basic 911 information; use nearby safer room; understand that normal route can change.	Door/route familiarity; scenario discussion; movement to off-campus safer location with adults.	Reliance on student action as a system requirement; assigned security tasks.
Proficient / middle school	More independent shelter/movement; secure ordinary door if capable; alternate route; accountability; help peers when safe.	Scenario decisions without simulation; exterior movement; communication; fire-alarm/lockdown concept in simple terms.	Expectation to search, confront, or rescue through danger.
Independent / high school	Adapt learned life-safety actions to real conditions; lock/verify ordinary room door; self-evacuate away from danger; communicate/account; immediate care within training.	Building-specific scenario conversations; route alternatives; off-campus accountability; fire-alarm competing-hazard discussion.	Professional security duties, tactical attack techniques as school-wide expectation, high-sensorial simulations.
All school staff	Initiate protective action per policy; lead students; adapt to changing hazard; accessibility; accountability; care.	Tabletops, walkthroughs, drills, systems verification, scenario decisions.	Assuming perfect information or perfect individual response.
Safety/operations/public safety	System cause-and-effect, command, verification, multi-hazard decisions, responder coordination, recovery.	Tabletop/functional/full-scale exercise appropriate to role; technology and building testing.	Using student drills to test adult tactical or command objectives.

Questions before teaching any group

- What is the developmental purpose of this lesson?
- What action can the learner reasonably perform without transferring adult responsibility?
- What language is necessary - and what detail is unnecessary?
- How will disability, sensory needs, trauma history, culture, language and individual readiness affect participation?
- What will parents/caregivers be told?
- How will we know the learner understands without creating fear?
- What support is available if a student or staff member experiences distress?

Source / alignment notes: [R23] [R1] [R2] [R6] [R7] [R8]

APPENDIX C | Fire Alarm During Lockdown Discussion Tool

Use this tool with the multidisciplinary team to produce a direct local procedure consistent with adopted code, actual building behavior and public-safety practice. Begin with the controlling distinction: automatic

fire-alarm or district-notification outputs do not, by themselves, constitute a human decision to change lockdown. Walk a representative building, trace the complete event chain and verify the procedure with the people expected to use it.

STARTING RULE FOR LOCAL ADOPTION
During a known or reasonably apparent violent threat, do not abandon a reasonably secure location solely because the fire alarm—or any automatic voice/text message tied to it—activates. Treat those outputs as urgent information, not proof of a new human decision. Move if actual fire, smoke, heat, structural danger or another immediate condition makes remaining unsafe, or when authorized incident command deliberately changes the protective action. Authenticate the decision—not merely the channel.

A. Define the trigger

- What local indicators make a violent threat “known or reasonably apparent”?
- Does the definition include official lockdown, direct staff/security/law-enforcement notification, direct observation, gunfire, and urgent first-hand warning?
- How will the procedure avoid allowing rumor or ambiguous social-media information alone to override normal fire evacuation?

B. Define the occupant rule

- What will occupants in reasonably secure rooms do when horns, strobes or automatic evacuation messages activate during the violent threat?
- Which directly perceived conditions—smoke, fire, heat, structural danger or an untenable space—require immediate movement?
- What is the action if smoke/fire enters the room?
- What is the action if a safe alternate exit leads away from both hazards?
- What do occupants already outside do?
- What do people in corridors/common spaces do?

C. Define alarm-source determination

- What alarm information is available at the panel/annunciator/security center?
- Who are the trained primary and backup investigators/decision-support personnel under the local procedure?
- How will panel, video, monitoring, radio, dispatch and occupant information be used first so an unprotected person is not sent toward a possible threat?
- What is the protective default if cause cannot be determined promptly or safely?
- How do fire department and police receive the alarm location/zone information?

D. Verify building behavior

- Which doors close, unlock, release or remain secured?
- How do fire doors, access-controlled doors and classroom locks interact?
- What happens to horns/strobes, prerecorded voice, text/app/email alerts, signage, elevators, HVAC/smoke control, monitoring transmission and backup power?
- Can responders enter secured rooms?
- Can occupants egress without special knowledge or tools?

E. Communications

- What immediate plain-language message states whether lockdown remains in effect and acknowledges that the fire alarm is being evaluated?
- Can command identify which messages were automatic, and can a deliberate human update be heard/seen, repeated, acknowledged, superseded and logged?

- Which human roles may decide and deliberately issue a change-of-action message, including initiation of an approved prerecorded script?
- How will occupants distinguish an authorized human decision from automatic output, stale information, rumor or an unauthenticated voice?

F. Training and exercise

- How will all employees—including substitutes, part-time staff, volunteers, coaches, contractors and after-hours users—learn and demonstrate their role?
- What calm, developmentally appropriate explanation and practice will each student group receive, including students with access/functional needs?
- How will fire, law enforcement, ECC/PSAP, emergency management, monitoring, facilities, communications and vendors orient and exercise together?
- What evidence—teach-back, scenario decision, observed performance, system log, acknowledgement, corrective closure and retest—will show the capability works?

Owner	Decision / action	Due date	Verified by
Fire/AHJ			
Law enforcement			
Facilities / fire alarm			
Security / emergency planning			
Administration / communications			
Mental health / student services			

Source / alignment notes: [R17] [R9] [R4] [R5]

APPENDIX D | Exterior Threat Planning Worksheet

Walk every exterior activity zone. A map viewed from an office is not enough. Stand where students stand and ask where the danger might be, where the closest safe movement options are, what barriers/terrain matter, how people receive alerts and how they become accountable after leaving campus.

Exterior zone	Normal population / time	Nearest safer options	If threat blocks reentry	Accountability / comms
Playground / recess				
Athletic field / stadium				
Bus loop / loading area				
Parent pickup / drop-off				
Student parking / staff parking				
Portable / detached classroom route				
Outdoor lunch / courtyard				
Maintenance / delivery area				
Walking route between buildings				
After-hours event area				

Exterior rule set to define locally

- Do not move toward obvious violent danger merely because the normal procedure says to enter the building.
- Identify when entering a nearby building is safer and when moving farther away is safer.
- Pre-identify off-campus safer destinations where practical, but do not make one predictable location the only option.
- Plan for fencing, road crossings, winter conditions, heat, terrain, footwear and disability/access needs.
- Give bus drivers and transportation dispatch specific approaching-campus and already-on-campus actions.
- Teach students not to return to the school after reaching safety just to find the normal adult/group or retrieve belongings.
- Create a redundant accountability process for students/employees who arrive at different safe locations.

WALKTHROUGH QUESTION

If the threat were between this group and the nearest building entrance right now, where would we want them to go instead?

Source / alignment notes: [R4] [R5] [P2]

APPENDIX E | Competing Hazards and Alarm Collision Matrix

A school may experience more than one emergency condition at the same time. The purpose of this matrix is not to create a universal hierarchy of alarms. It is to force the planning team to identify the protective objective, the information available to occupants, the building-system response, and the conditions that would require a change in action. Local decisions must be aligned with adopted codes, the EOP, public-safety partners and the authority having jurisdiction.

Collision / condition	Default protective objective	What could make the default unsafe	Questions the local plan must answer
Lockdown + fire alarm	Maintain protection from the violent threat while urgently assessing the alarm condition; automatic evacuation messages do not independently change the action.	Actual smoke, fire, heat, structural damage, an untenable space, a hazardous route, or a deliberate human-issued command changing the action.	Which outputs are automatic? Who makes/communicates the human decision? What if cause cannot be determined safely? What can occupants perceive? What does the building do?
Lockdown + visible smoke/fire	Protect from both hazards.	Remaining in the room becomes untenable; normal egress route may lead toward the violent threat.	What alternate exits exist? Can occupants move away from both hazards? How will public safety know occupied rooms changed locations?
Lockdown + severe weather warning	Protect first from the condition presenting the most immediate life threat at the specific location.	The normal severe-weather shelter may require exposed movement toward a violent threat; the lockdown room may be unsafe from the weather.	Which rooms offer combined protection? What authority changes the action? How are exterior groups handled?
Lockdown + natural-gas odor / hazardous vapor	Avoid violent threat while evaluating atmospheric danger.	Gas/vapor may require evacuation, isolation, HVAC action, or movement to a different building zone.	Who can shut HVAC or utilities? What routes avoid the threat and the release? How is fire department/hazmat input obtained?
Lockdown + explosion / structural damage	Get out of line of sight and protect from further violence while avoiding unstable areas.	Room, corridor, stairs or exterior wall may be damaged or unsafe.	What alternate protected spaces/routes exist? How will responders know about structural hazards?
Fire evacuation + apparent violent threat near route/assembly area	Move away from both the fire condition and the violent threat.	Continuing the routine fire route or assembly path may move occupants toward violence.	What permission do occupants have to deviate? What alternate assembly/accountability method applies?

Collision / condition	Default protective objective	What could make the default unsafe	Questions the local plan must answer
Exterior active threat + lockdown announcement	Move away from the threat or into a nearby safer building/space only if doing so does not require movement toward danger.	A blanket "go inside" action may move exterior occupants toward the threat.	Where are off-campus safer locations? How are exterior zones alerted? How are separated groups accounted for?
Police activity / gunfire outside + normal school operations	Keep occupants away from the external danger; secure/lockdown as conditions require.	Dismissal, arrival, recess or bus movement may place people into the danger area.	Who can pause movement immediately? How are buses redirected? What if students are already outside?
Lockdown + power/network/PA failure	Continue the protective action based on local observations and known information.	Electronic locks, radios, cameras, apps or PA may fail or change state; backup systems may not perform as assumed.	Which locks are fail-safe/fail-secure? What manual communication and door procedures exist? What runs on generator/UPS?
Any emergency + medical crisis	Maintain life safety while beginning care when the immediate area is reasonably safe.	Caregiver movement could expose additional people to the primary hazard.	Who brings aid? What supplies are available in secured areas? How do responders receive injury/location information?

A simple decision discipline

1. Identify the hazard you know or reasonably perceive - not merely the alarm label.
2. Use the default protective action that addresses that hazard.
3. Continuously evaluate whether the current location/action remains reasonably safer than the available alternatives.
4. When a new condition creates a greater immediate danger, change action in a way that moves away from both hazards when possible.
5. Communicate the change when safe and practical, but do not require perfect communication before immediate self-protection.
6. Account for people after movement and be prepared for groups to arrive at different safe locations.

ALARMS ARE IMPORTANT INFORMATION - NOT OMNISCIENCE

An emergency signal tells occupants that a system or person has initiated a protective message. It does not necessarily identify every hazard, every hazard location, or the safest route for every occupant. Good training teaches the meaning of the signal and the protective objective behind it.

Source / alignment notes: [R4] [R5] [R17] [P1] [P2]

APPENDIX F | Accessibility and Functional Needs Checklist

Accessibility must be built into each protective action, not added after the general plan is complete. The planning team should include people who understand the actual students, employees, visitors, devices, medications, communication supports and building conditions involved. Individual plans may be necessary, but the institutional system must also be usable by the widest range of occupants possible. [R4] [R5]

Planning area	Questions to verify	Local notes / owner
Mobility	Can the person secure in place? Can they reach alternate exits? Are stairs, slopes, snow, curbs, gates, elevators or refuge areas relevant? Are evacuation/transport devices appropriate, available and maintained?	
Door operation	Can the person operate the latch/lock/lever or egress hardware? Is assistance required? Does the plan preserve free egress and avoid special tools/knowledge?	
Hearing	Will PA, alarm, radio or spoken directions be perceived? Are visual/tactile/phone-based alternatives available and reliable?	
Vision	Can the person identify routes, door hardware, safe areas and responder directions? Are tactile/voice supports or trained assistance available?	

Planning area	Questions to verify	Local notes / owner
Communication	Can the person understand and express emergency information? Are AAC devices, interpreters, visual cards, picture cues or language supports needed?	
Cognitive / developmental	Is the vocabulary understandable? Can the learner remember a small number of actions? Have caregivers/specialists helped identify useful supports?	
Sensory / behavioral	Could alarms, darkness, crowding, silence or sudden movement trigger distress? What calming/sensory supports are realistic without compromising safety?	
Medical	Are medications, oxygen, diabetes supplies, seizure plans, suction, feeding needs or other equipment relevant? What if the normal nurse/health office is inaccessible?	
Service animals	How will service animals remain with the handler when possible, and what route/space constraints matter?	
Temporary conditions	How are injuries, crutches, casts, pregnancy, short-term illness or post-surgical restrictions incorporated?	
Visitors / substitutes	How does a person with a need receive immediate assistance if the school has no prior individualized plan for them?	
Transportation / off-campus	Can the person execute exterior movement, bus evacuation, field-trip shelter/evade, and off-campus accountability?	
Care / reunification	How are medications, equipment, communication supports and responsible caregivers reunited with the person after movement?	

FUNCTIONAL TEST

For every major scenario in the EOP, ask: “Who in this school cannot carry out the planned action as written - and what safe, dignified alternative have we actually prepared?”

Do not assume the usual helper can come

During a violent threat, a special-education teacher, nurse, paraprofessional, mobility assistant or other usual helper may be secured in a different area and unable to travel to the student. The person physically present may have to provide immediate support. Plans should identify that reality before the incident and give staff, students and responders enough information to act safely without expecting anyone to move through danger to reach a normal assignment. My legacy LPS training recognized this exact problem and treated participation, individual capability and responder communication as planning issues. [P2]

Source / alignment notes: [R4] [R5] [R1] [R2] [P2]

APPENDIX G | Parent and Community Conversation Guide

Transparent family communication can reduce misunderstanding and improve trust. Parents and caregivers should not discover the philosophy of an emergency-preparedness program from a frightened child after a drill. Explain what is taught, why it is taught, what is deliberately not simulated, and how developmental/individual needs are addressed.

Core messages to communicate

- The school teaches developmentally appropriate life-safety concepts; it does not ask children to become security personnel.
- Students learn simple, usable actions for the places they actually occupy - classrooms, hallways, restrooms, playgrounds, buses, athletics and other areas.
- Older/developmentally capable students may be taught how ordinary classroom doors close and lock, how to recognize a secured door, and that they may secure a nearby door during immediate danger when doing so is safe.

- The school uses calm education, discussion, walkthroughs and appropriately designed drills rather than deceptive or high-sensorial attack simulation for students.
- Students learn that an official announcement is important, but immediate danger may be recognized before the announcement; they may move toward safety based on what they can clearly see/hear and what they have been taught.
- The school directly explains that a fire alarm does not automatically cancel lockdown during a known violent threat; that automatic voices/texts may follow the alarm without a new human decision; that occupants move from immediate local fire/smoke/heat/structural danger; and that an authorized human-issued change will be explicit.
- The school plans for disability, medical, sensory, communication and functional needs and invites individualized input where appropriate.
- Parents receive information about reunification/accountability so that students who move to alternate safe locations know what to do next.

Questions parents commonly deserve answers to

Question	What a strong local answer should address
"Are you teaching my child to fight?"	Explain the developmental boundary, the emphasis on avoidance/protection/movement, and that students are not assigned security responsibilities. If last-resort survival is discussed, explain age level, purpose and limits.
"Why teach children about this at all?"	Explain the goal of replacing some of the unknown with calm, age-appropriate actions, just as schools teach other emergency life-safety concepts.
"Will drills be announced?"	State the local notification practice and specifically whether deception, simulated gunfire, fake injury or theatrical attackers are prohibited.
"What if my child is outside?"	Explain exterior movement, safer locations, accountability and how reentry toward danger is avoided.
"What if the fire alarm sounds during lockdown?"	Explain directly that the alarm normally means evacuate, but does not automatically cancel lockdown during a known violent threat. Automatic voice/text alerts may follow without a new human decision. Explain the immediate-danger exception, the explicit human-issued change message and the multidisciplinary/code review behind the local procedure.
"Can my child lock a classroom door?"	Explain what age/capability groups are taught, the hardware involved, free egress, and that no student is assigned routine building-security duties.
"What if my child has a disability or trauma history?"	Explain individualized review, accommodations, participation options, mental-health supports and parent/caregiver collaboration.
"How will I know where my child is?"	Explain accountability, reunification, alternate safe locations and why parents should not self-deploy to the school during the incident.

TRUST-BUILDING PRACTICE

Invite parents/caregivers to see the actual educational approach. When appropriate, demonstrate a calm scenario conversation, show the door/route concepts being taught, and explain the safeguards used to avoid unnecessary fear.

Source / alignment notes: [R23] [R1] [R2] [R6] [R7] [R8]

APPENDIX H | Staff Scenario Discussion Guide

These scenarios are designed for facilitated conversation, tabletop discussion or short walkthroughs. They are intentionally non-graphic. The facilitator should ask participants to explain what they know, what they do not know, what default action applies, what condition would change that action, who needs information, and how people will be accounted for.

Scenario	Discussion prompts	Capabilities being tested
1. Recognition before announcement	A custodian or teacher reports a person with a visible weapon approaching an entrance. The schoolwide announcement has not yet played. What may staff/students nearest the danger do? Who can initiate?	Recognition; staff authority; immediate self-protection; notification delay; student agency.
2. Student in hallway	A secondary student is alone in a corridor when unmistakable violence is heard nearby. An empty classroom is beside the student. What has the student been taught about entering, closing and securing the door?	Door knowledge; protective-space use; student decision authority; free egress.
3. Fire alarm during lockdown	Lockdown is in effect. Horns/strobes activate, followed by a prerecorded evacuation voice and an automatic district text. There is no smoke/heat in the room. Which outputs were automatic? What is the local default? Who may deliberately change it? What if smoke enters later?	Competing hazards; automation versus human decision; alarm interpretation; safe cause determination; human-issued update; alternate egress; accountability.
4. Fire alarm first	Normal fire evacuation begins. Occupants then hear/observe clear violent danger near the assigned route or assembly area. What changes?	Permission to deviate; movement away from both hazards; accountability outside the normal assembly.
5. Exterior threat	Students are at recess. The threat is between the group and the closest school entrance. The PA announces lockdown. Where should the group move?	Exterior plan; not moving toward danger; safer locations; accountability.
6. Arrival / bus loop	Buses are unloading when police gunfire occurs in the adjacent street/parking area. Some students are on buses, some on sidewalk, some inside. Who controls each group and what are the movement options?	Transportation; external threat; decentralized information; communications.
7. Teacher incapacitated	A classroom teacher becomes unable to direct the group during lockdown. Which students can operate the door? Who communicates? What should students not be expected to do?	Student capability boundaries; door operation; leadership without deputization.
8. Door will not latch	The normal classroom door is damaged or will not secure. What is the nearest viable protective option? Who reports the condition after the immediate move?	Physical protection; alternate spaces; pre-incident door maintenance.
9. Communications fail	PA is inaudible and cellular service is congested. People directly hear/see danger. What does the plan authorize before centralized messaging catches up?	Immediate action; redundancy; local information; authority.
10. Access/functional need	A student who uses a mobility device is in a location where the normal alternate route is inaccessible. The usual paraprofessional is secured elsewhere. What is the prepared alternative?	Individualized planning; assistance; responder communication; dignity.
11. Successful evade	A group safely leaves campus and reaches a nearby business. No one has a working school radio. What happens next?	Off-campus accountability; 911/family communication; no unsafe reentry.
12. All-clear uncertainty	A message arrives through an approved district platform, but participants cannot tell whether it was generated automatically or deliberately initiated by command. What evidence authenticates the decision? What is the local release/change method?	Decision authentication; authority/succession; message origin; supersession; responder access; door discipline; communication.

Facilitator questions after every scenario

- Could participants explain which messages/actions were automatic and which represented a deliberate human decision?
- Did different departments/public-safety partners give different answers?
- What did the building hardware/technology do, who owned that behavior, and did command and occupants understand it?
- Was a student, substitute, visitor or exterior group left without a usable option?
- Did the scenario create a conflict with fire/egress/accessibility requirements?
- What information was unavailable during the first seconds, and what action was still reasonable?
- What corrective action will be assigned, by whom, by when, and how will it be retested?

Source / alignment notes: [R1] [R2] [R4] [R5] [R17] [P1] [P2]

APPENDIX I | Student Scenario Guidance by Developmental Level

This appendix is not a student script and is not intended to be read verbatim to every age group. It helps practitioners translate the same protective objective into different levels of complexity. Local educators, school psychologists, special-education professionals, families and public-safety partners should help adapt language and practice.

Concept	Younger / early elementary	Later elementary	Middle school	High school
Immediate danger before announcement	"If something very unsafe is happening, listen to the safe adult near you and move to a safer place."	"If you see obvious danger, get to a safer place and tell a trusted adult. You do not have to stay in an unsafe spot waiting for an announcement."	"Use the nearest safer option you have practiced; alert others/adults when safe; do not remain exposed just because the PA has not spoken yet."	"Act on reasonably apparent immediate danger: shelter/secure, move away, communicate when safe, and do not make centralized notification a prerequisite for self-protection."
Door knowledge	Know that closed/locked doors help keep people separated from danger; adult usually operates it.	May assist an adult with closing/locking if taught and capable; know not to open the door during lockdown except under authenticated local procedure.	Understand how ordinary classroom doors close/latch/lock and may secure a nearby room during immediate danger when safe; maintain free egress.	Independently operate ordinary occupied-space door hardware they routinely use; verify secured state where practical; never leave safety to secure other areas.
Outside threat	Stay with safe adult; move away from danger to the safer place the adult identifies.	Know that "go inside" is not correct if danger is between the group and the building; move with adult to an alternate safer location.	Understand exterior routes, substantial barriers/terrain, off-campus safer locations and accountability; do not move toward the threat merely to follow the normal route.	Use structured adaptability: evaluate threat direction, nearest safe building/off-campus movement, accountability and no unnecessary reentry.
Fire alarm during lockdown	Know the fire alarm usually means leave. During a known violent danger, stay with the protected group unless fire/smoke makes the place unsafe or the trained adult gives an authorized change.	Know an alarm or automatic voice does not by itself cancel lockdown during a known violent threat; report smoke/fire and follow the trained human update or move from immediate danger.	Distinguish automatic alarm output from a deliberate human change; remain protected if the space is safe, move from actual fire/smoke, use safer alternatives and account when safe.	Apply the direct local rule: alarm/automatic message is urgent information, not proof of a new decision; evaluate immediate conditions, human authority, safer routes and accountability.
Separated from adult	Move to the nearest safe adult/safer place; do not go back toward danger to find the normal group.	Use nearby safer room/route learned in training; call/get help when safe.	Use practiced nearby protective options and communicate/account when safe.	Use independent life-safety reasoning within the locally taught options; do not self-deploy toward the danger to help.
Care	Comfort peers and get an adult when safe.	Call/get help; simple assistance within taught first-aid skills.	Call 911 when appropriate; basic bleeding/first-aid or peer support if trained and safe.	Immediate care within training once area is reasonably safe; communicate injury/location and support accountability/reunification.
What is NOT expected	No threat search, no confrontation, no adult responsibility.	No search, confrontation, rescue through danger or responsibility for group security.	No security patrol, threat pursuit, mandatory confrontation or rescue through active danger.	No professional security/responder duties; no expectation to confront, clear rooms, pursue or command public-safety operations.

LANGUAGE TEST

If a student-facing explanation would make a child believe they are responsible for stopping violence, protecting the institution, or rescuing through danger, the explanation has gone too far. If it leaves a developmentally capable student believing they must remain exposed because no adult or announcement is available, it has not gone far enough.

Source / alignment notes: [R23] [R1] [R2] [R6] [R7] [R8]

APPENDIX J | Building Systems Interoperability Checklist

Interoperability is not demonstrated because systems are connected on a diagram. It is demonstrated when people understand what happens under real emergency conditions, the systems perform as intended, code-compliant egress is preserved, responders can gain access, and one system does not unknowingly defeat the protective objective of another.

System / element	Verify during normal operation	Verify during lockdown / violent threat	Verify during fire alarm / power loss	Owner / test date
Classroom/office doors	Latch, close, inside operation, key/credential function, free egress.	Can occupant secure quickly? Can student/alternate adult operate if appropriate? Can responders enter?	Does fire alarm change anything? Does power loss change lock? Fire-door rating/closer remains compliant.	
Exterior access control	Scheduled state, reader/credential, door position, alarms.	Lockdown command, local egress, responder entry, fail-safe/fail-secure behavior.	Which doors release? What code/sequence controls release? What happens on generator/UPS?	
Fire alarm	Initiating devices, panel/annunciator, audibility/visibility, monitoring.	Can command see point/zone/device and obtain remote information without unsafe investigation? Which notifications and actions are automatic?	Horns/strobes/voice; connected texts/apps; monitoring/dispatch; door/elevator/HVAC actions; human authority to update/silence/reset; degraded method; logs.	
PA / mass notification	Coverage, intelligibility, exterior areas, after-hours.	Lockdown/update priority; manual initiation; origin label; authority/succession; delivery and acknowledgement; supersession/cancellation.	Can deliberate human messages override or coordinate with fire tones and automatic evacuation voice/text? Are all modes/languages understandable?	
Radios	Coverage, channels, batteries, interoperability.	Who can call lockdown? Who receives first-hand threat info? Can fire/law enforcement monitor/patch?	Can users hear/communicate over alarms? Backup charging/power?	
Video / VMS	Camera views, time sync, retention, operator access.	Who verifies threat/location? How are police given useful information without delaying protection?	Power/network resilience; alarm integration; smoke may obscure views.	
Intrusion / door position	Zones, forced/held-open alarms, after-hours process.	Can open/failed doors be identified? Who monitors?	Does fire alarm suppress/alter alarms? What is logged?	
Intercom / visitor entry	Call quality, release workflow, camera view.	Can entry remain controlled? Can staff avoid exposing themselves to investigate?	Does fire mode change release? Can responders use it?	
Elevators / stairs	Normal access, accessibility, keys.	What restrictions apply? Are stair doors/lobby routes usable?	Recall/unlock behavior; fire-service operation; smoke-control interface.	
HVAC / smoke control	Normal zones, shutdown controls, documentation.	Can HVAC action support a hazmat/gas condition without disrupting other safety needs?	Fire-alarm sequence, smoke-control modes, manual override authority.	
Backup power / UPS	What is actually on generator/UPS and for how long?	Access, PA, radio chargers, network, cameras, lighting.	Fire alarm, emergency lighting, doors, communications.	
Maps / responder data	Current room numbers, door numbering, utilities, keys/credentials.	Threat location, camera/door naming consistent with responder maps.	Fire zones, sprinkler/standpipe, annunciator, utility shutoffs.	

Proof-of-life questions

- When was the complete function last tested under the condition that matters—not merely inspected as an installed component?
- Who receives a failure alert, and who owns corrective action?

- Can the capability operate in a safe manual/degraded mode if the network, cloud service, automation or expected leader is unavailable?
- Do public-safety partners know how the system changes during fire alarm, lockdown and power loss?
- After software, hardware, door, alarm, notification, vendor or policy changes, has the school revalidated automation, message origin, authority, supersession and logs?
- Would a substitute, after-hours user or responding officer understand the physical condition they encounter?

INTEROPERABILITY TEST

Do not ask only, “Are the systems integrated?” Ask: “When Condition A occurs, what does System B do, who knows it happened, who can act, and does the resulting building condition still support life safety?”

Source / alignment notes: [R9] [R17] [R4] [R5] [P1]

APPENDIX K | After-Action / Lessons-Learned Worksheet

Use after tabletop exercises, drills, real emergencies and significant system tests. The purpose is learning, not blame. Capture the first-minute reality, differences between locations, human-system interactions, psychological impact, and corrective-action ownership.

1. What happened / what was tested?

Field	Notes
Date / campus / activity	
Scenario or actual event	
Participants / agencies	
Protective actions involved	
Systems involved	
Exterior areas / transportation involved	
Accessibility / functional needs tested	

2. First-minute reconstruction

Time / sequence	Who knew what?	What action occurred?	What information/system was missing or delayed?
Recognition			
First local protective action			
Staff/security notification			
Schoolwide notification			
911/public-safety notification			
First change in conditions			

3. Questions that matter

- Did anyone have to wait for permission when immediate self-protection should have been allowed?
- Did anyone act on a rumor when better verification was reasonably available?
- Were students outside classrooms left without a clear option?
- Could developmentally capable students operate the doors/spaces they were expected to use?
- Did a fire alarm or other signal collide with the protective action? Were people clear on the rule?
- Did anyone move toward a hazard because the normal route/procedure was treated as absolute?
- Did exterior groups, buses, visitors, substitutes and after-hours users receive usable information?
- What did doors, fire alarm, access control, PA, radios, cameras, HVAC and backup power actually do?
- Did the plan work for people with disability, sensory, medical, communication or mobility needs?
- What happened to accountability after people evaded to different locations?
- Did the exercise/drill cause confusion, distress or unintended fear? What should be changed?
- What did students or frontline employees notice that leadership did not?

4. Corrective action register

Finding	Risk / consequence	Corrective action	Owner	Due	Retest / proof

AFTER-ACTION STANDARD

Do not close a finding because a memo was issued. Close it when the new capability is installed or taught, understood by the people who need it, and retested under realistic but appropriate conditions.

Source / alignment notes: [R4] [R5] [R1] [R2] [P1]

APPENDIX L | Questions We Should Keep Asking

No guide should imply that the difficult questions are finished. Use this appendix during annual EOP review, capital planning, renovation, new technology deployment, staff training and after any significant incident or drill. The purpose is disciplined curiosity: challenge assumptions before circumstances challenge them for us.

People and authority

- What are students and employees expected to do during the seconds between recognizing danger and receiving the official message?
- Who can initiate lockdown/secure/evacuation/reverse evacuation under local policy?
- Can substitutes, custodians, food-service employees, transportation staff, coaches and after-hours users act without waiting for an administrator?
- What can a student appropriately do if the responsible adult is absent, injured, confused or in another location?
- Are we accidentally teaching passivity by telling people to wait for perfect information?

Doors, openings and spaces

- Can every occupied-space door expected to provide protection actually close, latch and lock?
- Do students who are developmentally capable understand the ordinary door hardware they use every day?
- Can every occupant exit without a key, tool or special knowledge?
- What happens if the closest protective room is empty or its door will not secure?
- Do staff know alternate exits/routes without turning those routes into rigid instructions?

Fire alarm and competing hazards

- Exactly what are occupants taught to do when horns, strobes, prerecorded voice and automatic district alerts activate during lockdown?
- What if smoke is visible? What if it is not? What if fire is between the room and the normal exit?
- Who can see the alarm zone/cause, and can that information reach decision-makers without sending someone into danger?
- Do fire, police, dispatch, monitoring providers and school command share the same expected occupant rule and human decision authority?
- What does the building and each connected platform do automatically, who owns each integration, and has the sequence been retested after every material change?
- What other alarms/warnings could collide with lockdown and create contradictory movement?
- Can command prove whether each message was automatic or deliberately initiated by an authorized human?
- Can an approved prerecorded script be deliberately launched after a decision without being confused with the identical script launched automatically?
- Who owns and retests the alarm-to-PA/app/door/elevator/HVAC/dispatch integrations after any change?
- What is the safe default when the alarm cause cannot be determined promptly or physical investigation would expose a person to the violent threat?

Exterior and transitions

- What if the attack begins in the parking lot, bus loop, playground, athletic field or adjacent street?
- What if the threat is between exterior students and the school?
- Where can exterior groups move that does not require them to converge on one predictable point?
- How do buses approaching the campus receive immediate direction?
- What if arrival/dismissal has already dispersed adult supervision?
- How are people accounted for when the safest action sends them to multiple off-campus locations?

Development, psychology and family trust

- Are we teaching useful information at the learner's developmental level, or avoiding the subject entirely?
- Are we using fear, surprise, deception or unnecessary simulation when calm explanation would teach the same capability?
- Have students been asked what confuses them about the procedures?
- Do parents know what is being taught and what is deliberately not being simulated?
- Are participation, accommodations and supports available for people with trauma history or other needs?

Systems, governance and sustainment

- Who owns every emergency capability and automation after the product, integration or policy is installed—and after staff/vendor turnover?
- What evidence shows people understand the rule and the complete detection-to-decision-to-action-to-accountability chain still works?
- Have legislation, guidance, facility renovation, access-control/fire-alarm work, notification software or vendor updates altered emergency behavior?
- Are public-safety maps, keys/credentials, room numbers, contacts and utility information current?
- Do school psychology, special education, nursing, transportation, facilities, IT, communications, security and public safety all understand the same protective objectives?

- What did implementation, a real event, an exercise or stakeholder feedback teach us that should change the next edition and the local EOP?

THE PLAN IS NEVER FINISHED. THE RESPONSIBILITY IS TO KEEP LEARNING.

Source / alignment notes: Practitioner synthesis informed by [R1]-[R18] and [P1]-[P4].

APPENDIX M | Layered Lockdown Readiness Matrix

Use this matrix as a governance and exercise tool. The purpose is not to score a school with a single number. It is to identify dependencies that could prevent a protective action from working under real conditions.

Layer	Readiness question	Evidence / test	Watch item
Policy / authority	Who can initiate, modify and end protective actions?	Role-based scenario exercise; substitute/after-hours check.	Centralized delay; conflicting authority; undocumented all-clear.
Students / staff	Do occupants understand age/role-appropriate options and door use?	Discussion + drill + student feedback.	Passive waiting; adult-only knowledge; confusing terminology.
Openings / access control	Do critical doors latch, lock, show status and preserve free egress?	Door-by-door function / position test.	Propped door; failed closer; remote lock assumption; bad credential.
Duress	Does activation reach the right person/system with usable location?	Live test by device type and location; failure-path test.	Dead zone; dead battery; stale device mapping; no acknowledgement.
Fire alarm	Do cause information, automatic outputs, human decision authority and protective messaging remain coherent?	Panel/monitoring/video/radio correlation plus alarm-collision exercise with fire, police, dispatch, school command and AHJ.	Automatic message mistaken for human decision; alarm masks update; unsafe investigation; unclear silence/reset/supersession authority.
Video / VMS	Can trained personnel call up the right views quickly?	Timed retrieval + camera health / naming audit.	Stale names, blind spot, poor image, unavailable remote access.
Weapons/gunshot detection	Is alert meaning tied to a written response threshold?	Candidate/verified/cancelled scenario; false/missed event review.	AI label treated as confirmed attack; cancellation does not reach all recipients.
Radio / LMR	Can school and responders communicate where they need to?	Coverage walk; emergency-button test; mutual-aid/interop exercise.	Dead zones; incompatible systems; wrong talkgroup; battery failure.
BDA/DAS/ERRCS	Does in-building responder enhancement work and remain supervised?	AHJ/public-safety acceptance + recurring system test.	Interference, failed amplifier, unsupervised trouble, no backup power.
Mass notification	Does each message disclose origin, reach intended populations, repeat, remain understandable/accessible and yield to authorized updates?	Origin, delivery, comprehension, language/accessibility, acknowledgement, supersession and cancellation test in difficult spaces/modes.	Trusted platform masks automation; vague code; inaudible/untranslated message; stale/conflicting alert; no closed-loop record.
Networks / power	Do critical systems survive likely outages?	PACE/failover exercise; UPS/generator dependency map.	Shared single point of failure; untested segmentation; expired UPS battery.
ICS / public safety	Does technology information feed a common command picture?	Joint tabletop/full-scale exercise.	Parallel vendor/school/police workflows; unclear staging or all-clear.
Transportation	Can buses divert or mobilize at the actual time of day?	Time-of-day driver/vehicle availability test.	Fleet count mistaken for immediate capacity; buses enter hazard.
Medical / reunification	Can care, accountability and family assistance work after distributed movement?	Victim-location / reunification exercise.	Care resources inaccessible; self-evacuees reported missing; family self-deployment.
Maintenance / governance	Is every deficiency owned, fixed and retested?	Corrective-action dashboard and annual executive review.	Known failures persist; ownership lost after staff/vendor change.

APPENDIX N | Duress, Detection and Notification Decision Worksheet

This worksheet helps a district make the decision chain explicit before technology is enabled. Complete a separate line for each duress type, detection source or alarm that can cause school or public-safety action.

Decision element	Question	Minimum planning output
Signal / device	What exactly happened?	Button pressed, radio emergency, visual firearm candidate, verified firearm, gunshot sensor, intrusion, fire pull, smoke detector, etc.
Identity / location	What does the receiver know?	Person/device ID, room/zone, GPS, camera, bus number, confidence/age of location.
Verification	Is verification required or is the human/device activation itself the emergency threshold?	Define when delay is acceptable and when it is not.
School action	What protective action can this signal initiate?	Lockdown, secure, evacuation, hold, no automatic action, location-specific message.
Public-safety action	Who contacts ECC/PSAP/911, with what status and location?	Machine candidate vs. verified event vs. direct human report must be distinguished.
Mass notification	What exact message goes to occupants, what initiates it, and is it automatic or deliberately launched by an authorized human?	Initial action; known location; origin; authority; accessible/language modes; acknowledgement; update; cancellation/all-clear.
Cancellation	Who may cancel, downgrade or supersede, and how does the human decision reach everyone already acting?	Prevent a vendor/alarm cancellation or automatic output from remaining active after school/public-safety command has changed the action.
Failure mode	What happens if primary network/device/monitoring path is unavailable?	PACE/degraded method and visible trouble indication.
Records	What logs/video/audio/activation data are preserved?	After-action, investigation, privacy and legal-hold requirements.
Testing	How often and under what conditions is the complete chain exercised?	Measure detection/activation, delivery, acknowledgement, action and cancellation times.

REFERENCES AND SOURCE METHODOLOGY

This practitioner resource distinguishes: (1) statutory requirements; (2) state/federal/association guidance; (3) official or quasi-official incident records; and (4) personal practitioner sources from Guy M. Grace, used as lived-experience/context rather than official findings. The paper labels Tennessee requirements, state guidance, local examples and practitioner interpretation separately. Where source material does not establish a fact—particularly a fire alarm's precise cause or initiator—the document does not convert uncertainty into certainty.

The recommendations are an interpretive practitioner synthesis and a handoff for local adaptation—not legal advice, a model code, a substitute for the local EOP, or a direction to disable required fire-protection functions. Applicable law, adopted code and the AHJ control. Before external publication or implementation, obtain multidisciplinary review for current law/code, terminology, accessibility, school psychology, fire-alarm engineering, emergency communications and public-safety operations.

Personal-source labels [P1]-[P4] identify my personal retrospective, training or working research materials. In the narrative, I refer to them as my own review, practitioner experience or earlier training rather than presenting them as detached institutional findings. They are used to explain practitioner development, local examples and the evolution of ideas. They are not substituted for official incident records when an official

record is available, and they should not be interpreted as the positions of the organizations with which I have been affiliated.

Reference key

[R1] National Academies of Sciences, Engineering, and Medicine. School Active Shooter Drills: Mitigating Risks to Mental, Emotional, and Behavioral Health. 2025. DOI 10.17226/29105. Source link

[R2] U.S. Department of Education. Considerations for Education Leaders in Preparing for Active Shooter Drills in Schools. 2025. Source link

[R3] Cybersecurity and Infrastructure Security Agency (CISA). K-12 Active Shooter Drills and Programs Landscape Assessment. 2025. Source link

[R4] U.S. Department of Education et al. Guide for Developing High-Quality School Emergency Operations Plans. 2013. Source link

[R5] FEMA Independent Study / school emergency planning resources (including multi-hazard planning and mass-casualty planning modules). Source link

[R6] Safe and Sound Schools. Especially Safe: Teaching and Training Guide, including Developmental Levels of Safety Awareness. 2021. Source link

[R7] National Association of School Psychologists (NASP). Best Practices for Preparing for an Armed School Intruder. 2020. Source link

[R8] National Association of School Psychologists. PREPaRE School Crisis Prevention and Intervention curriculum and related crisis-response resources. Source link

[R9] International Code Council. 2021 International Building Code, Section 1010.2.8, Locking Arrangements in Educational Occupancies. Source link

[R10] Grace, Guy. What Works in Active Threat Incidents: Best Practices for the K-12 Environment. Partner Alliance for Safer Schools (PASS). 2019. Source link

[R11] Safe Havens International. Post-Incident Review: Arapahoe High School Active-Shooter Incident. Hosted by Colorado General Assembly / Colorado School Safety Resource Center. Source link

[R12] Governor Bill Owens Columbine Review Commission. Report of the Columbine Review Commission. 2001. Source link

[R13] National Research Council. Deadly Lessons: Understanding Lethal School Violence - Westside Middle School case. 2003. Source link

[R14] U.S. Department of Justice / NCJRS archival report describing the 1974 Olean High School sniper incident. Source link

[R15] Snohomish County Multiple Agency Response Team (SMART). Marysville Pilchuck High School shooting investigation archive. 2015. Source link

[R16] Florida Department of Law Enforcement. Marjory Stoneman Douglas High School Public Safety Commission Initial Report. 2019. Source link

[R17] Tennessee Department of Education, Department of Safety & Homeland Security, and Department of Commerce & Insurance. Fire Alarm Delayed Evacuation Response Guidance. Spring 2024. Source link

[R18] Metropolitan Nashville Police Department. Covenant School Investigative Case Summary and closure of investigation. April 2, 2025. Source link

[R19] Commonwealth v. Bain (Mass. App. Ct.), factual record describing Jeremiah E. Burke High School fire-alarm evacuation and subsequent shooting. 2021. Source link

[R20] ABC11 / Associated Press reporting on Carver High School, Winston-Salem, N.C., shooting at the end of a scheduled fire drill. 2013. Source link

[R21] CBS News / Texas reporting on Santa Fe High School, including witness accounts concerning fire-alarm activation during the attack. 2018. Source link

[R22] St. Louis Metropolitan Police Department incident-report copy for Central Visual and Performing Arts High School, 2022; fire-alarm observations in witness statements. Archival copy. Source link

[R23] SchoolSafety.gov. Developmental Levels of Safety Awareness. Federal school-safety resource page linking developmental guidance for age-appropriate student preparedness. Source link

[P1] Grace, Guy M. A Look at a School Shooting From the Perspective of a Security Director: Arapahoe High School retrospective / modernized training draft. Personal practitioner source used in this review.

[P2] Grace, Guy M. Shelter-Evade-Defend-Care Active Threat Guidance. Personal practitioner training material used in this review.

[P3] Grace, Guy M. Caring for School First Responders - Learning How to Cope After School Violence. Personal practitioner source used in this review.

[R24] Indiana Department of Homeland Security. Guidance to Schools for Unplanned Fire Alarms. Current guidance page reviewed August 2026. Source link

[R25] CISA / NCSWIC. Leveraging the PACE Plan into the Emergency Communications Ecosystem; related PACE resources. Source link

[R26] CISA / SAFECOM / NCSWIC. Land Mobile Radio for Information Technology Professionals; P25 and emergency-communications resources. Source link

[R27] CISA. Communications Unit resources for NIMS/ICS incident communications planning. Source link

[R28] NFPA 1225, Standard for Emergency Services Communications, and related in-building emergency responder communications enhancement-system material; local adopted edition/AHJ controls. Source link

[R29] Federal Communications Commission. Signal-booster/public-safety interference findings and Part 90 public-safety licensing guidance. Source link

[R30] First Responder Network Authority. FirstNet Key to Improving Safety at Schools and Hospitals; public-safety broadband and school/public-safety support-user considerations. Source link

[R31] U.S. Department of Education. Active School Shooter Situations: Resources for K-12 Staff. Updated/reviewed 2026. Source link

[R32] SchoolSafety.gov. Inclusive Emergency Planning: Strategies and Resources. Source link

[R33] FEMA / U.S. Department of Education et al. Guide for Developing High-Quality School Emergency Operations Plans - evacuation, transportation, accountability and changing protective actions. Source link

[R34] FEMA. Comprehensive Preparedness Guide 101 (2025 revision) - evacuation transportation resources and accessible transportation considerations. Source link

[R35] Los Angeles Times / Associated Press. Sixth-Graders Were Planning Sniper Attack at School, May 23, 1998 - Becky-David Elementary false-fire-alarm plot. Source link

[R36] New Mexico State Police / San Juan County investigative material. Aztec High School Incident Report, 2017. Source link

[R37] CISA / SAFECOM. Emergency communications planning, plain-language and resiliency resources. Source link

[R38] City of Olean Fire Department. Department history entry documenting the 1974 Olean High School sniper incident and firefighter injuries. Source link

[R39] U.S. Department of Justice, Office for Victims of Crime archive; Wyoming/education archival material on the 1986 Cokeville Elementary School hostage/bombing event. Source link

[R40] Advanced Law Enforcement Rapid Response Training (ALERRT) Center at Texas State University / Security Industry Association. The Role of Locked Doors and Access Control in School-Based Active Shooter Events. 2026. Source link

[R41] CNN reporting/interviews concerning Apalachee High School student Bri Jones and her decision not to open a classroom door after observing the attacker producing a rifle. September 2024. Source link

[R42] Associated Press/CNN and Atlanta-area reporting concerning Apalachee High School students Landon Culver and Ronaldo Vega securing classroom doors during the September 4, 2024 attack; Georgia Bureau of Investigation incident background. GBI | AP: Culver | CNN: Vega

[R43] Cybersecurity and Infrastructure Security Agency (CISA). Wireless Priority Service (WPS) - priority calling for authorized users during cellular congestion or degradation. Source link

[R44] The I Love U Guys Foundation. Standard Reunification Method (SRM), including operational guidance and reunification exercise/site resources. Source link

[R45] Wyoming News Exchange / News Letter Journal. Cody High School receives AI-generated bomb/shooting threat; delayed start, police sweep and transportation/student redirection. January 29, 2026. Source link

[R46] Tennessee General Assembly. HB1644/SB1679, Public Chapter 563 (2024), concerning school procedures for fire alarms during known or suspected active-shooter events. Source link

[R47] CISA. Land Mobile Radio (LMR) Resiliency Resources. Source link

[R48] U.S. Department of Education. Equal Education Opportunities for English Learners—communication with limited-English-proficient parents in understandable languages. Source link

[P4] Grace, Guy M. and Michael Dorn. K-12 Visual Firearm Analytics and Gunshot Detection: A Practitioner Review of Capability, Evidence, Cost, Monitoring, Risk Prioritization, Liability, Governance, Stakeholders, Interoperability, and Known Product Approaches. Working paper for practitioner review, August 2026. Personal practitioner research used in this review.

Historical incident-review method

1. Use official investigative reports, government records, appellate factual records or primary agency archives when available.

2. Use reputable contemporaneous news reporting only when an official source located for this project does not answer the specific alarm/evacuation fact; label confidence accordingly.

3. Distinguish alarm occurrence from alarm cause. Do not infer who pulled an alarm or what detector initiated it without support.

4. Distinguish an attack occurring during a fire drill/evacuation from an attacker deliberately initiating a fire alarm.

5. Describe practitioner recollection as practitioner recollection and do not substitute it for official chronology.

6. Use incident detail only to explain a life-safety lesson; avoid unnecessary graphic description and avoid centering the attacker.

APPENDIX O

EOP capability and handoff record

Complete one record for each critical capability. Keep sensitive contacts and access details in the controlled local plan. Use OP01-OP16 to identify decisions; existing Appendices A-N retain their full supporting lessons.

Record identity

Capability / protective objective	_____
School, setting and operating hours	_____
Original lesson / chapter / source	_____
EOP section, annex and local procedure	_____

Ownership and action

Accountable role / alternate	_____
Sending role -> receiving role / acknowledgement	_____
Default action / trigger for change / authorized decision	_____
Immediate-danger exception and role boundaries	_____
Required people, information, equipment and access supports	_____

Failure, proof and approval

Primary assumption / what interrupts it	_____
Approved alternative / activation trigger / recipients	_____
Exercise observation / pass criteria agreed locally	_____
Gap / interim measure / owner / due date	_____
Correction / retest evidence / approval / next review	_____

APPENDIX P

PACE communication task worksheet

Complete a separate sheet for each essential communication task. Both sending and receiving users must have a feasible method and know when to switch. Supporting method: CISA/NCSWIC [S3].

Task and users

Task, message and required acknowledgement	_____
Sending role / alternate; receiving role / alternate	_____
Settings, hours, languages and access needs	_____

Four operating methods

Primary: method, device, recipient and switch trigger	_____
Alternate: method, device, recipient and switch trigger	_____
Contingency: method, device, recipient and switch trigger	_____
Emergency: safe, feasible method and limits	_____

Independence and exercise

Shared power / carrier / network / cloud / login / staff	_____
How the receiver learns that the sender changed method	_____
Batteries, charging, contact records and operating duration	_____
Failure tested / receipt confirmed / observed limitation	_____
Owner, correction, retest and next review	_____

APPENDIX Q

Mapping and responder-access verification

Use with authorized dispatch, law-enforcement, fire/EMS and facilities partners. This public worksheet identifies what to verify; actual keys, credentials, access locations and sensitive map data belong in controlled local records.

Location and information

Map/version owner and alternate / last field verification	_____
Room, door, gate, camera and alarm identifiers agree	_____

Exterior areas, portables, accessible routes and utilities	_____
Digital retrieval by dispatch, responders and mutual aid	_____
Controlled offline/printed version and update process	_____

Access and coordination

Approved campus, building and secured-space access	_____
After-hours / absent employee / mutual-aid arrangement	_____
Power, network and credential-system failure alternative	_____
Custody, authorized use, revocation and periodic checks	_____
School liaison, current hazard information and release process	_____

Joint test

Location report -> common map -> physical identifier	_____
Approved access tested / discrepancy / interim measure	_____
Responsible owner / correction / witnessed retest	_____

APPENDIX R

Worked exercises: movement and competing alarms

These are hypothetical adult planning exercises. Expected outputs illustrate a decision process; local approved procedures, actual conditions and individual access needs determine the action. Use calm discussion and planned testing.

Exercise 1 | Dismissal, exterior threat, congested phones

Conditions	Buses are loading, an exterior group is away from classrooms and a credible violent threat is reported near the normal entrance. The district app is unavailable.
Work through the decision	The responsible roles protect people from the actual threat location, stop or redirect inbound movement through approved procedures, activate an independent communication path and identify safer destinations without requiring return toward danger.
Required handoffs	Event/school lead -> dispatch and district command; transportation -> drivers; exterior supervisors -> accountability; public information -> families. Include visitors and people needing assistance.
Evidence of completion	Recipients acknowledge direction; dispersed groups enter one reconciliation

	process; accessible transport and alternate family-information methods are identified. Record any missing recipient or unsafe assumption.

Exercise 2 | Fire alarm during a known violent threat

Conditions	Lockdown is active. An automatic fire message sounds, the principal is unavailable and a responder map uses an outdated room name. Later, credible local smoke information is reported.
Work through the decision	Retain the complete rule: ordinary fire procedures apply without a known/apparent violent threat; during the violent threat the alarm alone does not cancel lockdown; immediate local fire/smoke/heat or structural danger requires a safer available action; authorized command may deliberately change the action.
Required handoffs	Activate succession; correlate alarm and violence information with dispatch/fire/law enforcement; use remote information first; correct location identification and verify approved responder access. Do not send unprotected staff toward the alarm origin.
Evidence of completion	The team distinguishes automated output from a human decision, addresses local smoke danger, sends accessible updates and accounts for movement. Test the agreed building/message sequence under controlled conditions.

APPENDIX R

Worked exercises: cyber disruption and recovery

Continue the exercise beyond initial notification. Use Appendices O-P to record ownership and alternatives, and Appendix S to close the observed deficiencies. Examples remain hypothetical.

Exercise 3 | Cyber isolation during a protective action

Conditions	IT identifies a cyber incident and proposes network isolation. Cloud maps and electronic rosters become unavailable; a notification gateway shares the affected connection.
Work through the decision	IT and command identify safety dependencies before coordinated containment decisions where practicable. Activate approved independent communication and manual/offline processes. Confirm actual door behavior; do not assume a software outage changes every lock.
Required handoffs	IT/cyber -> safety/facilities/command; communications -> receiving users; records lead -> accountability; map custodian -> responder liaison; leadership -> continuity and restoration owners.
Evidence of completion	The team names a functioning contact path, controlled offline information and a reconciliation process. Restoration requires technical checks plus verification that permissions, automation and protective functions behave as approved.

Exercise 4 | Reunification site unavailable; support staff absent

Conditions	Several groups are safe off campus, the primary reunification site cannot open and a usual accessibility assistant is absent. The incident continues long enough to require relief and additional supplies.
Work through the decision	Activate the evaluated alternate site and transport arrangements, assign trained backup assistance and reconcile safe/unverified/transported statuses. Issue an accessible family update with confirmed information and the next update expectation.
Required handoffs	Command -> reunification/transport; accountability -> family assistance; nursing/accessibility -> site/support teams; logistics -> relief and supplies; recovery lead -> next-day service planning.
Evidence of completion	Site capacity, access, communications, authorized release and medical/language supports are verified. Staff relief and longer-term follow-up have named owners. No person is sent back toward danger solely to be counted.

APPENDIX S

Change, correction and retest record

Use this record with Appendix K. Close a finding only after the affected capability and handoffs have been demonstrated again. Keep original incident lessons and source attribution linked to the correction.

Change or finding

Date / affected capability / original lesson or exercise	_____
Observed failure, changed condition or proposed change	_____
Effect on people, system behavior and partner information	_____
Accountable owner / alternate / decision authority	_____

Action and verification

Approved interim measure / affected users informed	_____
Correction, resources, responsible party and due date	_____
Maps / procedures / configuration / training updated	_____
End-to-end retest, participants and observed result	_____
Closure authority / evidence location / next review trigger	_____

Worked record: room-renaming discrepancy

Finding and interim measure	Dispatch and a school map use different names. The map owner confirms the physical location with authorized partners and distributes a controlled

	correction pending replacement.
Correction and proof	Update the approved map, relevant device/location labels and partner copies; retire superseded versions. A joint report-to-location walkthrough confirms agreement before closure.

APPENDIX T | 1 OF 2

Additional sources and application method

Additional source alignment for OP01-OP16 and Appendices O-S. New planning applications and hypothetical exercises are practitioner synthesis. Original incident accounts, qualifications and sources R1-R48/P1-P4 remain in the main text.

[S1] U.S. Department of Education. Active School Shooter Situations: Resources for K-12 Staff. Used for pre-incident responder information, access, family assistance and recovery planning.

Open primary source

[S2] U.S. Department of Education / REMS. Emergency Operations Plan Maintenance: Reviewing, Updating, and Strengthening Plans (2022). Used for plan maintenance, alternates, exercises and improvement.

Open primary source

[S3] CISA / NCSWIC. Leveraging the PACE Plan into the Emergency Communications Ecosystem. Used for independent alternatives, switching triggers, receiving users and exercises.

Open primary source

[S4] CISA. Wireless Priority Service Frequently Asked Questions (2024). Used to distinguish eligible priority cellular calling from preemption and universal device/application priority.

Open primary source

Source review date: October 6, 2026. These additions establish planning questions and local verification records; the existing document retains its jurisdiction, code, role and developmental boundaries.

APPENDIX T | 2 OF 2

Additional sources and application method

Additional source alignment for OP01-OP16 and Appendices O-S. New planning applications and hypothetical exercises are practitioner synthesis. Original incident accounts, qualifications and sources R1-R48/P1-P4 remain in the main text.

[S5] First Responder Network Authority. The Network. Used for the public-safety broadband priority, preemption and resilience features; local eligibility, coverage and service arrangements require confirmation.

Open primary source

[S6] CDC. Preparing for a School Emergency; and After a School Emergency. Used for access/functional needs, accountability, continuity, family communication and recovery.

Open primary source

CDC: After a School Emergency

[S7] CISA. Protecting Our Future: Partnering to Safeguard K-12 Organizations from Cybersecurity Threats (January 2023). Used for cyber preparation and connecting incident response to school emergency planning.

Open primary source

[S8] CISA and partners. #StopRansomware Guide. Used for protected backups, critical-service dependencies, coordinated incident response and restoration priorities.

Open primary source

Source review date: October 6, 2026. These additions establish planning questions and local verification records; the existing document retains its jurisdiction, code, role and developmental boundaries.

Multidisciplinary Review and Publication Status

Recommended review perspectives for this resource and its local application are listed below. The list identifies roles to involve; it does not document completed review or endorsement.

- K-12 practitioner / emergency-planning leadership
- Fire marshal or other fire-code authority having jurisdiction
- Local fire service and law enforcement
- Fire-alarm / life-safety systems professional
- Facilities / openings / access-control professional
- School psychologist / trauma-informed preparedness professional
- Special education / accessibility / nursing representative
- Transportation and operations representative
- Legal/policy review appropriate to the jurisdiction
- Where appropriate, student and parent/caregiver representatives

PUBLICATION STATUS | FIRST EDITION

This independently authored practitioner resource addresses protective actions across changing conditions, including fire-alarm/lockdown decisions. Local use remains subordinate to applicable law, adopted code, the local emergency operations plan (EOP), and public-safety / authority-having-jurisdiction coordination.

The resource is technology-neutral. It emphasizes clear authority, trained people, usable communication, verified building behavior and retesting. Small and rural districts may meet the operational objective with trained roles, radios/manual messages and documented procedures when those methods are reliable.

This is a living practitioner resource. Guy M. Grace intends to update it as Tennessee Public Chapter 563 and related guidance are implemented, as districts and public-safety partners gain operational experience, and as additional evidence, code interpretation and after-action learning are obtained. Future updates will continue to distinguish statutory requirements, state guidance, local implementation and practitioner interpretation.

Recheck source links and jurisdiction-specific requirements before local adoption.

EDITION RECORD | OCTOBER 6, 2026 | VERSION 1.0

First combined publication edition: 99-page master resource, 16-page practitioner field guide, and nine-page decision guide, plus the manual cover and reader guide.

The original lessons, incident accounts, data and tools are retained. Operational practices OP01-OP16 and Appendices O-T add EOP ownership, backup arrangements, handoffs, worked exercises and verification records.

Future substantive revisions should update the manual and affected individual guides together, with the new edition date and a record of changes.

SOURCES / FURTHER READING

Selected sources and evidence

Sources informing the discussion of prevention, human recognition, warning systems and protective options. Official records, practitioner observations and interpretation are identified separately.

[S1] U.S. Department of Education. Active School Shooter Situations: Resources for K-12 Staff. Open source.

[S2] Federal Bureau of Investigation. Run-Hide-Fight / Safe in Schools and bleeding-control guidance. Open source.

[S3] SchoolSafety.gov. Threat Assessment and Reporting Resources for K-12 Schools, Apr. 2025. Open source.

[S4] CISA. K-12 School Security Guide (3rd ed.) / layered security. Open source.

[S5] National Academies. School Active Shooter Drills: Mitigating Risks to Mental, Emotional, and Behavioral Health (2025). Open source.

[S6] Florida Department of Law Enforcement. MSDHS Public Safety Commission, Initial Report (2019). Open source.

[S7] FBI. Active-shooter incidents, 2001-2016 (Sparks Middle School). Open source.

[S8] Safe Havens International. Arapahoe High School independent post-incident review. Open source.

[S9] National Research Council. Deadly Lessons: Westside Middle School case. Open source.

APPLICATION AND EVIDENCE

This independent practitioner resource is educational and vendor-neutral. It encourages schools to strengthen established practices; it does not replace a local EOP, adopted protocols, law or code. Historical findings are distinguished from practitioner interpretation. Verify current guidance and local requirements before application.

Source / method: Sources reviewed November 2026. The agency, research and incident references above support the specified points; their inclusion does not imply endorsement. Personal site/rally examples are labeled practitioner recollections, not official findings.

SOURCE LIBRARY / ADDITIONAL CONTEXT

Sources Supporting the Architecture, Assessment and Mapping Discussion

These authoritative materials complement—not replace—the existing incident reviews, PASS references and technical sources throughout the manuscript.

[U1] Cybersecurity and Infrastructure Security Agency (CISA).

K–12 School Security Guide, Third Edition; School Security Assessment Tool. Systems-based school vulnerability assessment and risk-planning context.

https://www.cisa.gov/resources-tools/resources/k-12-school-security-guide-3rd-edition

[U2] U.S. Department of Education, REMS Technical Assistance Center.

Crime Prevention Through Environmental Design: Enhancing the Security of Your K–12 School Using an All-Hazards Approach. Foundations and contemporary social dimensions of CPTED.

https://www.ed.gov/media/document/rems-crime-prevention-through-environmental-design-k12-fact-sheet-508c-2024-113226.pdf

[U3] U.S. Department of Education.

Emergency Planning: school EOP planning, multidisciplinary review, exercises and continuing improvement.

https://www.ed.gov/teaching-and-administration/safe-learning-environments/school-safety-and-security/emergency-planning

[U4] CISA.

Instructional Guide to the Active Assailant Emergency Action Plan Template, 2025. Floor plans, maps and responder coordination.

https://www.cisa.gov/sites/default/files/2025-02/Instructional_Guide_to_the_CISA_EAP_Template_20250204_508.pdf

[U5] U.S. Department of Education.

Active School Shooter Situations: Resources for K–12 Staff. Current, shared site assessments and responder-access information.

https://www.ed.gov/teaching-and-administration/safe-learning-environments/school-safety-and-security/preventing-targeted-violence-and-threat-assessment-resources/active-school-shooter

[U6] Partner Alliance for Safer Schools (PASS).

Introducing the PASS Safety and Security Guidelines, Seventh Edition. Layers, roles, architectural elements and component categories.

https://passk12.org/pass-recommendations/introducing-pass-guidelines-version-7/

[U7] Seattle Public Schools.

Crime Prevention Through Environmental Design: school-campus walkthrough and implementation example.

https://www.seattleschools.org/departments/safety-security/cpted/

These sources are educational and descriptive; citing them does not imply institutional approval, code interpretation or adoption of this publication. Verify jurisdiction-specific requirements, adopted code editions and the latest technical guidance before local implementation.

PART —

Practitioner Field Guide

A focused companion resource; use alongside the full practitioner analysis and its evidence.

A practitioner journey through people, plans, systems and changing conditions

GUY M. GRACE

INDEPENDENT PRACTITIONER RESOURCE

PRACTITIONER FIELD GUIDE

PROTECTIVE ACTIONS WHEN CONDITIONS CHANGE

Options Based Readiness for Active Threats and Changing Conditions in Schools

Protective action must remain connected to the conditions people actually face.

Recognition | Default Actions | Adaptation | Exterior Threats | Competing Hazards
Doors and Systems | Communications | Accessibility | Accountability | Care

GUY M. GRACE

OCTOBER 2026

First edition | October 6, 2026

PURPOSE AND USE

How to Use the Field Guide

This guide turns the full practitioner paper into a route for local decisions, training and verification.

The central conclusion is direct. A default protective action remains essential, but the people expected to use it also need enough knowledge and practiced options to respond when the conditions that justified the default have changed.

This is structured adaptability. It is not free-form improvisation and it does not transfer professional security or emergency-command duties to students or untrained staff. It connects a familiar procedure to recognition, safer alternatives, communication, accountability and care.

How the publication set works

Resource	Use it for
Protective Actions When Conditions Change	Full analysis, evidence, incident review, planning detail and practitioner tools.
Practitioner Field Guide	The broad protective-actions framework, leadership briefings, training design and implementation decisions.
Fire Alarm During Lockdown Practitioner Decision Guide	The specialized competing-hazard rule, message authentication, safe investigation and fire-alarm response chain.

Who should use it

- District and school leaders, safety teams, educators, substitutes, volunteers and after-hours program leaders.
- Law enforcement, fire and EMS, ECC and PSAP personnel, emergency management, code officials and the authority having jurisdiction.
- Facilities, transportation, student services, IT, communications, monitoring providers, system integrators and other vendors.
- State and federal stakeholders who shape guidance, training, funding, interoperability, data and practitioner support.

Use this guide to identify the decision that needs work. Use the chapter and appendix references to reach the full explanation and tools in the master paper. Local procedures still require multidisciplinary review, adopted emergency-plan language, public-safety coordination and compliance with law and code.

Master paper path: Perspective and Respect; Executive Summary; Chs. 01–02, 05–10, 17–20, 36–37.

COMMON FLOW ACROSS PROTECTIVE ACTIONS

Recognize • Use the default • Check conditions • Adapt if necessary
Communicate and account • Care • Reassess as conditions change

Apply the flow to the hazard, conditions and role. Immediate self-protection need not wait for an announcement when life-threatening danger is reasonably apparent.

RECOGNITION AND ACTION

Recognition Before Notification

People closest to danger may need to protect themselves before the institution can build and broadcast a common operating picture.

Schoolwide notification is important because it aligns people, activates support and creates a common protective action. It is not always the first moment when danger becomes known. A person who directly sees a weapon, hears gunfire, receives a credible immediate warning or observes violence should not be trained to wait for a formal announcement before taking reasonable protection.

Reasonable indicators

- An official lockdown, active-threat or emergency notification.
- Direct observation of an apparent weapon, attack or other immediate life-threatening condition.
- Gunfire or other sounds reasonably associated with serious violence.
- A direct warning from a nearby person who appears to have immediate knowledge.
- Other immediate circumstances that would cause a reasonable person to believe protective action is necessary.

The threshold is not every rumor, ambiguous noise or unverified social-media post. The plan should distinguish a reasonably apparent immediate danger from information that needs confirmation. That distinction should be taught and exercised before a crisis.

Two timelines must work together

Moment	Institutional need	Occupant need
Recognition	Receive and clarify information.	See, hear or otherwise recognize abnormal danger.
Initial action	Initiate the protective action and notify partners.	Act to protect life without waiting for avoidable delay.
Coordination	Build the common operating picture and establish command.	Keep using the safest reasonable option and communicate when possible.
Update	Issue an authenticated change, cancellation or all-clear.	Adapt when credible new information or local conditions change.

Local test. Ask whether policy, training and message design allow immediate self-protection without turning rumor into a second command system.

Master paper path: Chs. 01, 10, 18, 20; Appendices H, I and L.

FIELD GUIDE / PRACTICAL CONVERSATION

The Missing Seconds: what comes first?

Consider what happens from the first human recognition of danger until people across the school can take appropriate protective action.

PROTECT FIRST - WARN WHEN SAFE

An individual who first recognizes immediate danger may shelter or move away before an institution-wide warning exists. **Communication, duress activation and care occur only if safe to do so.** The witness is not the school's emergency communications system.

Ask every school team

FIRST LOCAL MOMENT	WHAT NEEDS TO BE TRUE
Recognize	Staff and developmentally capable students understand reasonably apparent danger without treating rumors as confirmed facts.
Protect	Ordinary doors, safer spaces, movement options and accessibility supports are usable before an announcement.
Warn	Authorized adults can safely initiate a suitable warning through more than one method; backup receivers are identified.
Reach	Students, staff, visitors, exterior groups, buses and after-hours people receive understandable information.
Act and adapt	The warning supports a fitting protective decision; command can issue an update if conditions change.
Account and care	Those reaching other safe locations can report when safe, receive help and enter reunification.

FIVE-MINUTE ADULT DISCUSSION

At a point near your busiest transition, ask: "Who could recognize danger first? Who could protect themselves immediately? Who else would still not know? How could the warning safely reach those people? What verifies that protection occurred?"

Source / method: See Field Guide sections on recognition, protective decisions and communications; master Chs. 10, 13, 15–20. Follow the adopted EOP and public-safety coordination.

PROTECTIVE DECISIONS

Default Actions and Permission to Adapt

A strong plan gives people a dependable starting point and a limited way to change action when remaining with the default has become more dangerous.

Default actions reduce delay and confusion. They remain the starting point unless directly perceived conditions, credible new information or an authorized command change the life-safety objective. Options-based preparedness should therefore define boundaries, not simply tell people to improvise.

A simple decision discipline

1. Recognize the hazard or reasonably apparent condition.
2. Use the established default action that addresses that hazard.
3. Check whether the current location, route or action remains reasonably safe.
4. Change action only when a safer available option better protects life under the conditions that actually exist.
5. Communicate the change when safe and practical, then account for people after movement.
6. Provide immediate care when safe and remain prepared to reassess.

Examples of bounded adaptation

Starting action	Condition that changes the problem	Possible life-safety objective
Secure in a room	Smoke, fire, heat or structural danger makes the room unsafe.	Move away from both hazards using the safest available route.
Move inside	A violent threat is between an exterior group and the assigned entrance.	Move away from the threat to a safer location and account for the group.
Use the assigned exit	Violence, gunfire or another hazard blocks or threatens the route.	Use an alternate route or safer area while communicating and reassessing.
Remain behind a locked door	The door will not latch or the space cannot provide reasonable protection.	Use another protective space or available barriers when movement is safer.

Boundaries matter. Students are not expected to search, confront, pursue or perform professional security tasks. Staff and students need practical options that preserve distance, barriers, movement away from danger, communication and accountability.

Master paper path: Chs. 08–10, 17–20, 24; Appendices B, E, H and I.

LOCATION AND TRANSITION

Threats Beyond the Classroom

A lockdown plan is incomplete if it assumes every person is in a classroom and every threat is inside the building.

Exterior areas, arrival, dismissal, buses, athletics, portable buildings, hallways, restrooms, cafeterias, field spaces and after-hours activities combine open routes, moving populations and uneven supervision. The plan must account for where people actually are and whether normal movement would take them toward danger.

Questions for each setting

Setting	Questions the local plan must answer
Playgrounds and fields	Where can groups move away from the threat? Which locations provide distance, barriers, communication and later accountability?
Arrival and dismissal	Who stops inbound movement? How are buses, families and pedestrians redirected before they enter the hazard area?
Buses and transportation	Can dispatch reach every driver? What happens when routes are already operating or the campus is inaccessible?
Athletics and shared spaces	Who has authority after hours? Can visitors and opposing teams receive a clear action without knowing the school plan?
Portables and remote areas	Do occupants have independent notification, reliable locks, safer destinations, communications and accountability methods?
Off campus movement	What nearby destinations have been evaluated, and how will students avoid returning toward the school to find an adult or normal pickup point?

Accountability after movement

Successful movement may scatter groups across multiple safe locations. Accountability must tolerate delay and partial information. It should allow students and staff to report safety without requiring anyone to return toward danger. The plan should also address family notification, accessible transportation, medical needs, responder access and reunification from more than one location.

Walkthrough test. Stand where students gather outside and ask where they would move if the threat were between them and the nearest building entrance.

Master paper path: Chs. 21–23, 30; Appendices D, F, G and H.

FIELD GUIDE / EXTERIOR BRIEFING

The forgotten scenario: options beyond the walls

An exterior group, approaching bus or student already off campus may need a different protective action than an interior classroom.

Consider multiple paths; do not mandate one destination

The author's earlier practice of identifying potential rally locations in multiple directions illustrates a planning principle: a single predetermined route or gathering point may become unsafe. A district can evaluate alternatives without asking anyone to run toward danger or treating one location as universally correct.

LOCAL TEST	WHAT THE TEAM SHOULD VERIFY
People and threat location	Where are students, staff and visitors during recess, arrival/dismissal, field events and after hours? Where might immediate danger be?
Movement options	Are nearby and off-campus safer choices evaluated for threat direction, physical accessibility, roads, weather, obstacles and supervision?
Notification	Can exterior groups and transportation receive and understand alerts without relying only on classroom PA or a phone app?
Avoid return into danger	Can already-safe people remain away from the school and enter accountability without physically returning toward the threat?
Change and re-evaluate	Who updates an unsafe destination or closed route and reaches people acting on an earlier instruction?
Care and reunification	Are separated groups, individuals with support needs and family contacts included in a safe, protected reconciliation process?

THE EXTERIOR QUESTION

If danger is between this group and the nearest school entrance, does the plan offer another reasonable, known, usable option? And can the school learn where the group went?

Source / method: See Field Guide discussion of threats beyond the classroom, master Chs. 21–23 and Appendices D, F, G and R. Rally locations remain subject to local approval and safe conditions.

COMPETING HAZARDS

Fire Alarm During Lockdown

The fire-alarm problem is one important application of the broader rule that protective action must remain connected to the actual hazard picture.

Under ordinary conditions, occupants follow the adopted fire plan. During a known or reasonably apparent violent threat, a fire alarm does not automatically cancel lockdown. Horns, strobes, prerecorded or synthesized voice messages and connected notifications show that the fire system activated. They do not, by themselves, prove that an authorized human assessed both hazards and decided that evacuation is safer.

Operational starting points

Condition	Starting point
No known or reasonably apparent violent threat	Follow the established fire procedure unless another verified condition or authorized direction requires a different action.
Known or reasonably apparent violent threat	Maintain reasonable protection while the location remains safer from both hazards. Authenticate any decision to change action.
Immediate local smoke, fire, heat or structural danger	Move away from the immediate danger using the safest available route while preserving distance from the violent threat.
Deliberate command change	Follow the authorized human direction and continue responding to immediate conditions at the occupant's location.

Automation is information

A familiar voice, official platform or district sender can identify the apparent source or channel. It does not prove that an authorized human evaluated competing hazards. The same sentence can mean something different when a system launches it automatically than when a designated decision-maker deliberately initiates it after assessment.

Safe investigation. During a violent-threat condition, do not send unprotected staff toward the alarm origin. Begin with panel information, monitoring data, video, radio reports and credible occupant observations. Coordinate physical investigation through the locally approved process with fire, law enforcement and incident command.

Use Fire Alarm During Lockdown Practitioner Decision Guide for the full nine-page decision rule, training obligations, state implementation example, response-chain tests and district handoff.

Master paper path: Chs. 24–29; Appendices A, C and E.

PHYSICAL AND TECHNICAL CAPABILITY

Doors Spaces and Building Behavior

The building is part of the response. It must continue to support protection when alarms, automation, power, communications or command conditions change.

Door hardware is among the simplest and most consequential protective features in a school. Occupants need to understand the ordinary door they use, how it closes and locks, whether it is actually secured, how egress remains available and what alternative exists if the opening fails. That knowledge is life-safety education, not a security assignment.

Verify the layered system

Layer	What the team must verify
Openings and access control	Latch, lock, door position, release, fire-door behavior, credential override, emergency access and free egress under normal and degraded conditions.
Fire alarm and building automation	Initiating devices, panel information, programmed messages, door interfaces, elevators, HVAC and smoke control, monitoring and reset authority.
Communications	Coverage, intelligibility, priority, manual override, acknowledgement, updates, cancellation and alternate pathways.
Power and networks	Battery, UPS, generator, wired and wireless dependencies, failover behavior, monitoring and expected operating time.
Responder access and maps	Current keys, credentials, floor plans, room numbering, utility information, camera naming and accessible staging.
Transportation care and reunification	Available drivers and vehicles, medical resources, accountability locations, family assistance and movement between safe sites.

Interoperability is bigger than technology

Interoperability means that people, policy, procedures, buildings, communications, technology, public safety and care functions produce one understandable response. Two devices can exchange data while the overall system still creates unsafe movement or conflicting instructions. A weak handoff between layers can defeat otherwise capable components.

Capability test. A lock is not a capability if occupants do not know how to use it, and automation is not a capability if nobody owns its effects.

Master paper path: Chs. 09, 14–16, 29; Appendices J and M.

FIELD APPLICATION F01

Locate, reach and protect

Use this check with facilities, dispatch, responders and the school safety team. Document an owner and alternate for each item and test the actual arrangement.

Maps and identifiers	Match rooms, doors, gates, cameras and alarm zones to physical labels. Include exterior areas and portables. Confirm dispatch and mutual-aid usability, controlled offline availability and an update owner.
Responder access	Verify approved access from the campus boundary to secured spaces, including after hours, absent staff and power/network failure. Preserve occupied-side egress and the protection of secured areas.
Building behavior	Record actual door, fire-alarm, PA, elevator, HVAC and emergency-power behavior. Identify automatic outputs, authorized human controls and the usable alternative for a failed function.
All operating settings	Repeat the check during arrival/dismissal, bus operations, athletics, shared use and off-site programs. Identify who reaches people without school devices or accounts.

Put it into practice

Walk one reported location with an unfamiliar authorized responder. Verify the shared identifier, approved access, current information and failure alternative. Record and correct each mismatch.

Master path: OP02, OP03, OP07, OP08; Chs. 13–16, 21–24, 29; Appendices J, Q and S

Use the master for complete lessons, evidence, qualifications and worksheets.

INFORMATION AND COMMAND

Communications Technology and Decision Authentication

Technology can detect, transmit and automate. People still must interpret conditions, establish priorities and authorize changes in protective action.

Emergency communications should function as an ecosystem rather than a single platform. District radio, public-safety radio, cellular service, public-safety broadband, Wi-Fi, wired pathways, private radio systems and backup power solve different problems. The plan should define primary, alternate, contingency and emergency methods and then test their real coverage, staffing, power and recipient readiness.

Information sources and decision limits

Source	What it can contribute	What it cannot decide alone
Video and monitoring	Location, movement, visible conditions and event reconstruction.	Intent, every blind area or the complete protective action.
Weapon or gunshot detection	A machine or sensor event that may accelerate attention and verification.	Context, command authority or whether every person should take the same action.
Duress	A human request for help, possibly with identity or location.	The full event type, current conditions or whether the response chain completed.
Alarm and automation	A system condition and programmed outputs.	Whether an authorized human deliberately changed the protective action.
Mass notification	Rapid distribution of an instruction or update.	Whether the message was understood, received everywhere or remains correct as conditions change.

Design for degraded conditions

- Define who can initiate, update, cancel and confirm each message or protective action.
- Preserve a direct human method when automation, network service or normal leadership is unavailable.
- Use plain language, location information and accessible formats without delaying urgent action.
- Test message precedence, competing alerts, after-hours recipients and congested networks.
- Record initiation, acknowledgement, update, cancellation and failure for after-action review.

Verification beats assumption. Test the complete path from detection through human decision, action, accountability and reassessment.

Master paper path: Chs. 13, 15–16; Appendices J and N.

FIELD APPLICATION F02

Communicate and lead through failure

Complete the communication task before selecting technology: sender, receiver, useful message, acknowledgement and action. Connect communications, IT/cyber and command planning.

Cellular and radio	Check coverage, congestion assumptions, devices, batteries and actual priority-service arrangements. School radio, responder radio, cellular service and Wi-Fi require their own verification.
PACE	Name primary, alternate, contingency and emergency methods; switching triggers; how both ends change methods; and power/network/carrier/login/staff dependencies. Prove alternatives are usable.
Cyber continuity	Connect the cyber incident response plan to the EOP. Identify safety effects of isolation, independent communication, protected offline records, restoration priorities and verification before reuse.
Authority and handoffs	Name who initiates, changes and ends each action; leadership succession; public-safety liaison; staffed receivers; acknowledgement/escalation; and how cancellation reaches everyone already acting.

Put it into practice

Exercise an unavailable leader plus a failed primary communication path. Require an acknowledged handoff and a coordinated update. Add a cyber-related dependency failure and identify the next feasible method.

Master path: OP04-OP06, OP09-OP10; Chs. 10, 13, 15–16; Appendices N, O, P and R

Use the master for complete lessons, evidence, qualifications and worksheets.

HUMAN CAPABILITY AND CARE

People Access Accountability and Recovery

A plan is not ready if it works only for the easiest person to move, hear, understand, protect or account for.

Developmentally appropriate preparedness does not mean withholding all useful information. It means adjusting language, complexity, practice method and expected independence. Students should not be assigned security duties, but they are legitimate participants in their own protection and may need simple options when an adult, room, route or announcement is unavailable.

Planning questions by population

Population or condition	Planning question
Young learners	Can a trusted adult explain simple protective actions, safer places and how children reconnect with help?
Older students	Can students recognize immediate danger, use ordinary doors and spaces, move away from a threat and report safety without taking security duties?
Substitutes visitors and after-hours users	Can a person with no prior individual plan use the opening, communication method and local protective options?
Disability and access or functional needs	Can the person receive the message, use the route or space, communicate, bring needed devices or medication and receive assistance if the usual helper is absent?
Separated or self-evacuated groups	Can they reach a safer location, report status and reunify without returning toward danger?
Staff and responders	Are immediate care, peer support, family assistance, relief, behavioral-health support and longer-term recovery planned?

Accountability is a continuing capability

Accountability begins during movement and continues through safe arrival, medical care, family assistance and reunification. It must work when groups are dispersed, normal rosters are incomplete, cellular networks are congested or the designated reunification site is unavailable. No accountability method should require a person to reenter danger to become counted.

Care is part of the response system. Immediate first aid, bleeding control where trained, medical access, psychological first aid, support for families and care for school personnel and responders should be planned before the incident.

Master paper path: Chs. 05–09, 12, 30–31; Appendices B, F and I.

FIELD APPLICATION F03

Keep people connected to care

Follow each population from recognition through protection, movement, accountability, care and reunification. Carry support needs and responsibility across every handoff.

Access and language	Confirm usable messages, routes, doors and vehicles; trained assistance and alternates; medical/device needs; interpretation and communication supports. Include staff, visitors and after-hours users.
Accountability and family updates	Reconcile students and adults at multiple locations, on buses and at hospitals. Time-stamp reports, distinguish verified from unverified information, resolve duplicates and communicate confirmed information to families.
Reunification	Verify primary/alternate site capacity, accessible transport, communications, care, identity/authorization checks and release records. Provide a controlled manual method if applications are unavailable.
Care and recovery	Locate reachable trained care and supplies without additional exposure. Plan relief, prolonged support, family assistance, employee/responder support, essential services and continuing recovery.

Put it into practice

Tabletop dispersed groups, an absent usual assistant and an unavailable reunification site. Demonstrate a safe alternative, one reconciliation process, authorized release and a family update without requiring return toward danger.

Master path: OP03, OP11-OP13, OP16; Chs. 11–12, 21–23, 30–31; Appendices F, G, O and R

Use the master for complete lessons, evidence, qualifications and worksheets.

EDUCATION AND EVALUATION

Teach Understanding Without Creating Fear

Preparedness improves when people understand the purpose of an action, can apply it to changing conditions and can explain what they would do next.

Education and drills serve different purposes

Education builds understanding through calm explanation, discussion, walkthroughs and age-appropriate scenarios. Drills practice selected actions. Tabletop exercises test adult coordination and authority. Functional exercises test communications, systems and handoffs. One method should not be expected to prove every capability.

Avoid surprise, deception, simulated gunfire, graphic injury, fake blood or other methods that may cause participants to believe an actual attack is occurring. Developmentally appropriate does not require secrecy, and psychological safety does not require silence about reasonable life-safety questions.

Use the scenario conversation model

1. Explain the purpose of the protective action and the usual default.
2. Present one manageable condition that changes the problem.
3. Ask what is known, what remains unknown and which option better protects life.
4. Ask how the person would communicate, account for others within their role and seek help.
5. Reinforce the safe boundary, then identify what the plan or system must improve.

Evidence of learning

- Teach-back in the learner's own words.
- Observed use of doors, routes, communication methods and accountability procedures.
- Short decisions involving an unavailable adult, blocked route, threat outside or competing alarm.
- Exercise records that identify gaps, owners, due dates, completion evidence and retesting.
- Family communication that explains what is taught, what is not simulated and how support is provided.

Training cadence. Orient people before assignment. Refresh at least annually. Retrain after material changes to policy, law, buildings, technology, messages or staffing. Exercise jointly and verify corrective action.

Master paper path: Chs. 11, 32–33, 35; Appendices G, H, I and K.

GOVERNANCE AND ALIGNMENT

Local State and Federal Responsibilities

The strongest guidance helps each level do its part while preserving local authority, code compliance and multidisciplinary decision-making.

No single discipline owns the entire protective-action problem. School leadership, educators, student services, facilities, transportation, communications, IT, law enforcement, fire and EMS, emergency management, code officials and families understand different parts of the operating picture. Build the team before writing the rule.

A useful division of responsibility

Level	Useful contribution	What to avoid
School and district	Adopt the rule, define authority, map actual conditions, coordinate with public safety, train each population, exercise, correct gaps and sustain the capability.	Copying a model without testing buildings, people, systems, routes, laws and local responder expectations.
State	Align education, fire, law enforcement and emergency-management guidance; identify legal and code boundaries; support training, review tools, grants and consistent terminology.	Conflicting agency messages, product-driven requirements or a single procedure that ignores jurisdiction and building differences.
Federal	Support research, incident learning, cross-hazard guidance, interoperability, accessibility, information sharing, practitioner tools and funding alignment.	Treating technology acquisition, one drill or one national script as proof of local operational readiness.
Associations and providers	Translate standards, share implementation lessons, support commissioning and maintenance, disclose system limits and help test the full response chain.	Presenting a product, platform or branded method as a complete protective-action program.

Authority and code remain local

This guide is not a universal operating directive, legal opinion or code interpretation. Districts must verify current law, adopted code, emergency-plan requirements, public-safety coordination and authority-having-jurisdiction direction. Those requirements should define the safe boundary for adaptation rather than prevent teams from examining foreseeable conflicts before an emergency.

Governance questions

- Who may initiate, modify and end each protective action?
- Who owns every automated message, door response, integration and configuration change?
- What evidence proves training, commissioning, maintenance, correction and retesting?
- How will state and federal guidance remain usable for small, rural, urban and resource-constrained districts?

Master paper path: Chs. 03–04, 34–35; Appendices J through N; References and Source Methodology.

IMPLEMENTATION AND HANDOFF

Move From Guidance to Capability

Begin with a manageable set of decisions, verify actual conditions and close each gap with a named owner and retest date.

A practical first thirty days

Step	Action	Minimum output
1	Build the multidisciplinary team.	Named school, public-safety, code, facilities, IT, communications, transportation, student-services and accessibility leads.
2	Define the default actions and adaptation boundaries.	Clear authority, conditions, exceptions, messages, succession and immediate-action permissions.
3	Walk actual settings and document system behavior.	Verified doors, alarm effects, routes, exterior zones, communications, automation, occupied spaces and degraded modes.
4	Teach and exercise by role and developmental level.	Audience-specific instruction, joint scenarios, observable learning evidence and recorded gaps.
5	Assign correct and retest.	Owner, due date, completion evidence, approval and next proof-of-life date for every material finding.

Questions to carry back

1. What happens before a schoolwide announcement reaches everyone?
2. Where are people when the normal action or route is unsafe or unavailable?
3. Can occupants recognize changed conditions without assuming security duties?
4. Can each population receive, understand and perform the action with accessible support?
5. Can the team distinguish automation from an authorized human decision?
6. What happens when a door, radio, network, leader, route or reunification site is unavailable?
7. Would school, fire, law enforcement, EMS, emergency management and code partners give compatible answers?
8. Who owns each gap, what proves correction and when is the retest?

Use the practitioner tools

Appendices A through N provide incident review, developmental readiness, fire-alarm, exterior threat, competing-hazard, accessibility, family, scenario, interoperability, after-action, readiness and duress tools.

Appendices O through T add capability records, PACE communications planning, mapping and responder-access verification, worked exercises, change-and-retest records, and supplemental sources.

Living resource note. This field guide, the master paper and the Fire Alarm During Lockdown Practitioner Decision Guide form a living practitioner resource. Recheck source links and jurisdiction-specific requirements before local adoption, and revise local procedures when exercise results, after-action learning, law, code, staffing, buildings or systems change.

Master paper path: Chs. 34–37; Appendices A through T; Publication Status and Source Methodology.

FIELD APPLICATION F04

Make each lesson an operating commitment

Use the EOP as the organizing document. Preserve the evidence and qualifications in the master while assigning local actions, alternatives and proof that the capability works.

Put it in the plan	Link each capability to the basic plan, functional annex, hazard-specific procedure and building instructions. Assign authority, owner/alternate, dependencies, failure trigger and alternative.
Teach each role	Orient before assignment and after material changes. Use calm, accessible instruction, teach-back and role-specific walkthroughs. Preserve developmental limits and student voice.
Test the handoff	Use the worked adult exercises, then controlled functional tests. Confirm the receiving role, acknowledgement and resulting action. Include exterior, off-site and after-hours populations.
Correct and sustain	Assign interim measures, resources, due dates and a witnessed retest. Reconcile maps, contacts, access, software/configuration, training and partner information after changes.

Put it into practice

For the next team meeting, complete one Appendix O capability record, one Appendix P communication task and one Appendix S corrective action. Use local exercise results to select the next priority.

Master path: OP01, OP14-OP16; Chs. 03–04, 11, 32–35; Appendices O-S. Sources and methods: Appendix T.

Use the master for complete lessons, evidence, qualifications and worksheets.

PART —

Fire Alarm During Lockdown Decision Guide

A focused companion resource; use alongside the full practitioner analysis and its evidence.

A practitioner journey through people, plans, systems and changing conditions

GUY M. GRACE

INDEPENDENT PRACTITIONER RESOURCE

A NINE-PAGE PRACTITIONER DECISION GUIDE

FIRE ALARM DURING LOCKDOWN

Competing Hazards During an Active or Apparent Violent Threat

MASTER PAPER ↔ DECISION GUIDE P. 1

Perspective, Respect and Use; Executive Summary; Chs. 01–02, 05–09, 17.

WHY THIS MATTERS

A violent threat and a fire signal can exist at the same time. If occupants treat every automated alarm or message as an automatic command to evacuate, a life-safety system can unintentionally move people from known protection into an unassessed danger.

Master paper: Executive Summary; Chs. 24–29.

Purpose, scope and intent

This decision guide applies the master paper to fire-alarm and lockdown conditions during a known or reasonably apparent violent threat. It does not replace ordinary fire procedures, adopted codes, the emergency operations plan, or direction from authorized incident command and the authority having jurisdiction.

Master paper: Perspective and Executive Summary; Chs. 25–29; Apps. A, C, and E.

Six truths to carry forward

1. **Danger begins before notification.** People closest to danger may need to protect themselves before a schoolwide announcement catches up. [Master Chs. 01, 10]
2. **Default action plus permission to adapt.** A common procedure is essential; actual conditions may make another protective action safer. [Master Chs. 17, 19–20, 25–27]
3. **Empowerment is not deputization.** Students are not security personnel, but they are legitimate participants in their own protection. [Master Chs. 08–09]
4. **Age-appropriate is not information-deprived.** Change complexity, language and expected independence - not the right to useful safety information. [Master Chs. 05–07, 33]
5. **Drills and education are different.** Practice actions calmly; build understanding without deception or high-intensity simulation. [Master Chs. 33, 35; Apps. B, H, and I]
6. **Verification beats assumption.** A device, door, message or plan is not a capability until the complete response chain is tested. [Master Chs. 15–16, 34–35; Apps. J-M]

CONTROLLING PRINCIPLE

THE EMERGENCY BEGINS WHEN THE DANGER BEGINS - NOT WHEN THE ANNOUNCEMENT IS MADE.

Master paper: Executive Summary; Chs. 01–02, 05–10, 17–20.

READER GUIDE

How to Use This Decision Guide

This decision guide is the fire-alarm implementation and training companion to Protective Actions When Conditions Change. Use the separate Practitioner Field Guide for the broader protective-actions framework.

WHAT THIS DECISION GUIDE DOES

It extracts the decisions and actions that K-12 teams must be able to explain, teach, coordinate, exercise and verify, then directs the reader to the corresponding master-paper analysis, evidence and planning detail.

Who should use it

1. District and school leaders, safety teams, educators, substitutes, volunteers and after-hours program leaders.
2. Law enforcement, fire/EMS, ECC/PSAP, emergency management and the authority having jurisdiction.
3. Facilities, IT, communications personnel, monitoring providers, system integrators and other vendors.
4. Those developing student, family, accessibility, accountability and reunification education.

Move among the publication set

1. Begin with the decision-guide page that matches the immediate fire-alarm, training or implementation need.
2. Use the named chapter, appendix or section to read the full explanation in the master paper.
3. Return to the decision guide for briefing language, training outcomes, exercises and corrective-action prompts.

Two-way navigation crosswalk

Decision guide starting point	Go to the master paper	Return to the decision guide for
Purpose and urgency — Decision guide p. 1	Perspective, Respect and Use; Executive Summary; Chs. 01–02, 05–09, 17.	Scope, controlling premise and the six truths.
Fire alarm and authentication — Decision guide p. 3	Chs. 13–14, 24–29; Appendices A, C, and E.	Operational rule, automation boundary and safe-investigation guardrail.
Occupant and stakeholder training — Decision guide p. 4	Chs. 03–04, 11, 32–35; Appendices B, C, and G-J.	Audience outcomes, teaching methods, evidence and cadence.
State implementation and ULSS - Decision guide p. 5	Executive Summary; Chs. 03–04, 15–16, 25, 28, 34–35; Appendices J-N; Tennessee law and guidance in References.	Implementation tests, Tennessee framework and ULSS lifecycle.
District action and handoff — Decision guide p. 6	Chs. 34–37; Appendices C, F, and J-N; Publication Status.	First-30-days actions, ownership, retesting and living-resource handoff.

WHAT THIS DECISION GUIDE IS NOT

It is not a standalone emergency plan, universal operating directive, legal opinion, code interpretation or substitute for local multidisciplinary decision-making. Local procedures must be approved, trained, exercised and coordinated with public-safety partners and the authority having jurisdiction.

Navigation basis: Protective Actions When Conditions Change, October 2026. Chapter and appendix references were validated against this release; revalidate them after substantive revisions to the master paper.

COMMON FLOW ACROSS PROTECTIVE ACTIONS

Recognize • Use the default • Check conditions • Adapt if necessary
Communicate and account • Care • Reassess as conditions change

Apply the flow to the hazard, conditions and role. Immediate self-protection need not wait for an announcement when life-threatening danger is reasonably apparent.

DECISION POINT

Fire Alarm During Lockdown

The alarm is life-safety information. It does not, by itself, identify the cause, select the safest route, or cancel protection from a violent threat.

MASTER PAPER ↔ DECISION GUIDE P. 3

Chs. 13–14, 24–29; Appendices A, C, and E.

CONTROLLING RULE

A FIRE ALARM DOES NOT AUTOMATICALLY CANCEL A LOCKDOWN.

Master paper: Chs. 13–14, 24–29; Apps. C and E.

Condition	Operational starting point
No known or reasonably apparent violent threat	Follow the established fire procedure unless another verified condition or authorized direction requires a different protective action. [Master Chs. 27–28]
Known or reasonably apparent violent threat	Maintain reasonable protection while the location remains safer from both hazards. Move when immediate local fire, smoke, heat or structural danger makes remaining unsafe, or when authorized incident command deliberately directs a different action. [Master Chs. 24, 27; App. E]

Authenticate the decision - not merely the channel

A familiar voice, official platform or district sender can identify the apparent source or channel. It does not, by itself, prove that an authorized human evaluated the competing hazards and deliberately changed the protective action.

Signal or message	How occupants should understand it	Master paper
Horns, strobes or automatically triggered evacuation voice	Alarm information—not, by itself, a human decision to abandon lockdown.	Chs. 27–29
Automatic district text, app alert or email	An official channel can still carry an automated message. Automatic does not equal authenticated.	Chs. 13, 27
Door release, elevator recall, HVAC/smoke-control or other programmed response	A building action may be required by design; it is not a protective-action decision for every occupant.	Chs. 14–15, 29 App. J
Prerecorded message deliberately initiated by a designated human after assessment	May communicate an authenticated decision when local policy defines the authority, wording and initiation control.	Chs. 13, 27
Direct human command from authorized incident command	Follow the deliberate action change while continuing to respond to immediate conditions at the occupant's location.	Chs. 04, 13, 27

SAFE INVESTIGATION GUARDRAIL

During a known or reasonably apparent violent threat, do not send unprotected staff toward the alarm origin. Use the fire-alarm panel, video, monitoring data, radio reports and credible occupant information first; coordinate verification with fire, law enforcement and incident command.

Master paper: Chs. 04, 28; App. C.

This is not 'ignore the fire alarm.' It is a competing-hazard rule: do not exchange known protection for an unassessed route, and do not remain where immediate fire conditions make the space unsafe.

TRAINING OBLIGATION

Teach the Rule Before the Crisis

A written rule is not operational until occupants, families, responders and system owners can explain it, apply it and coordinate it under realistic conditions.

MASTER PAPER ↔ DECISION GUIDE P. 4

Chs. 03–04, 11, 32–35; Appendices B, C, and G-J.

PLAIN-LANGUAGE TEACHING POINT

AUTOMATED DOES NOT MEAN AUTHENTICATED. During a known or reasonably apparent violent threat, an automatic fire-alarm voice message or automatically generated district alert is not, by itself, proof that an authorized human has changed the protective action.

Master paper: Chs. 13, 27.

Audience	Required learning outcome	Method and evidence	Master paper
All staff	State the fire-alarm/lockdown rule; recognize immediate local danger; identify who may change the action and how that decision is authenticated.	Onboarding, annual refresh, and retraining after material change; scenario teach-back and observed performance.	Chs. 04, 27, 33–35 Apps. C, H, J, K
Substitutes, part-time staff, volunteers and after-hours users	Use the same decision rule without relying on a particular administrator, room or normal schedule.	Role-specific briefing, quick-reference aid, walkthrough and short scenario check.	Chs. 03, 23, 33 Apps. H, J
Students	Use calm, developmentally appropriate language to explain alarms, adult direction, immediate local danger and safer options—without assigning security duties.	Instruction separate from high-intensity drills; age-appropriate practice and teach-back.	Chs. 05–09, 11, 33 Apps. B, I
Parents and caregivers	Understand what students are taught, why an alarm may not cause immediate evacuation during violence, and how reunification/accountability will work.	Plain-language orientation, FAQ, multilingual/accessibility support and scheduled review.	Chs. 11–12, 30, 33 Apps. F, G
Law enforcement, fire/EMS, ECC/PSAP, emergency management and AHJ	Use one decision model, authority structure, terminology, investigation process, message sequence and transfer-of-command expectation.	Joint orientation, communications test, tabletop and after-action review.	Chs. 03–04, 13–16, 24, 34–35 Apps. C, E, J, K
Facilities, IT, communications, monitoring providers and vendors	Know every automatic system effect, message source, manual control, fallback, maintenance duty and change-control owner.	Sequence-of-operations test, configuration record, failure exercise and corrective-action retest.	Chs. 13–16, 24, 29, 35 Apps. J-N

What counts as proof of learning

Attendance is not competence. Use teach-back, short scenarios, observed performance, exercise records, documented corrective actions and retesting. Training must be right-sized, accessible and technology-neutral so the capability survives staff turnover, device failure and vendor change.

Master paper: Chs. 33, 35; Apps. H, I, and K.

MINIMUM TRAINING CADENCE

Orient before assignment. Refresh at least annually. Retrain after a material policy, building, system, message, staffing or legal change. Exercise jointly, document gaps, correct them and verify the correction.

Master paper: Chs. 33, 35; App. K.

IMPLEMENTATION

Test the Whole Response Chain

The capability is the completed sequence - not a product, policy sentence or successful drill in isolation.

MASTER PAPER ↔ DECISION GUIDE P. 5
Executive Summary; Chs. 03–04, 15–16, 25, 28, 34–35; Appendices J-N; Tennessee law and guidance in References.

Capability	Local question	Proof-of-life test	Master paper
Recognition and permission	Who may take protection before an announcement or when conditions change?	Short scenario with students and staff.	Chs. 01–02, 05–11, 17–20, 32–33
Alarm and building effects	What releases, closes, unlocks, recalls or changes when the alarm activates?	Live panel/device sequence test with facilities, vendors and AHJ.	Chs. 14–15, 24, 29 App. J
Authentication and messages	Can people distinguish automation from a deliberate human decision?	Trigger automatic and human-initiated messages; verify wording, precedence and intelligibility.	Chs. 13, 16, 27 App. J
Safe investigation	How is cause assessed without exposing unprotected staff?	Use panel, video, monitoring, radio and occupant reports in a joint tabletop.	Chs. 04, 28 App. C
Communications and command	Do PACE pathways, succession, ICS and Unified Command work if normal people or locations are unavailable?	Failover, radio-coverage and transfer-of-command exercise.	Chs. 04, 13, 16 App. J
People and access needs	Can every population understand and perform the action in every occupied setting?	Accessible, multilingual scenarios covering classrooms, transition spaces and after-hours use.	Chs. 11–12, 23, 30–33 Apps. F-I
Governance and sustainment	Who owns automation, configuration changes, deficiencies, completion evidence and retesting?	Change log, closed-loop corrective-action record and executive review.	Chs. 03–04, 15–16, 34–35 Apps. J-M

State implementation takeaway

Tennessee Public Chapter 563 and the state's Spring 2024 Fire Alarm Delayed Evacuation Response Guidance provide one implementation example: determine cause, consult fire and law enforcement, comply with code, designate and train primary and backup personnel, integrate the process into the emergency plan, train staff annually and review the plan each year. Other states may use different statutory language, authorities or procedures. Local teams still must define the competing-hazard rule, automation boundary, authority, scripts, safe investigation method and joint exercise process. Every jurisdiction should verify current law, code, EOP language, public-safety coordination and AHJ direction before adoption.

Master paper: Executive Summary; Chs. 04, 25, 28, 34; Tennessee law and guidance in References.

ULSS takeaway

1. Assign one accountable owner for each automated action, dependency and configuration change. [Master Chs. 03–04, 15–16, 34–35; *Apps. J, K, M, and N]*
2. Test the closed loop: detect, assess, decide, authorize, communicate, acknowledge, act, account and reassess. [Master Chs. 15–16 *and 35; Apps. J and K]*
3. Treat procurement, commissioning, training, maintenance, exercise, after-action correction and retesting as one lifecycle. [Master Chs. 15–16, 34–35; Apps. J-M]

PROOF-OF-LIFE EXPECTATION
A door, alarm input, radio, camera, detector, notification path, network or generator that has not been tested under realistic conditions can become an assumption rather than a capability.

Master paper: Chs. 15–16, 34–35; Apps. J-M.

LOCAL HANDOFF

Take This Back to Your District

Use the master paper to challenge the plan, walk the building, compare answers across disciplines and close what the exercise exposes.

MASTER PAPER ↔ DECISION GUIDE P. 6

Chs. 34–37; Appendices C, F, and J-N; Publication Status.

Start with six questions

1. What happens if the schoolwide announcement is delayed, inaudible, automatic or unavailable? [Master Chs. 13, 16, 27; App. J]
2. Can staff and developmentally capable students explain that a fire alarm does not automatically cancel lockdown - and identify the exceptions? [Master Chs. 27, 33; Apps. C, H, and I]
3. What does the building physically do when the fire alarm activates during lockdown, and who owns each programmed action? [Master Chs. 14–16, 24, 29; App. J]
4. Would school leadership, law enforcement, fire/EMS, emergency management, ECC/PSAP and the AHJ give the same answer to the same scenario? [Master Chs. 03–04, 13, 16, 34–35; Apps. C, E, and J]
5. How are substitutes, visitors, people with access or functional needs, buses, fields, restrooms, hallways and after-hours activities protected and accounted for? [Master Chs. 11–12, 21–23, 30–33; Apps. D and F-I]
6. Who owns each deficiency, when will it be corrected, what proves completion and when will the correction be retested? [Master Chs. 15–16, 34–35; Apps. J-M]

A practical first 30 days

Step	Action	Minimum output	Master paper
1	**Build the multidisciplinary team.**	Named school, public-safety, AHJ, facilities, IT, communications, transportation, student-services and accessibility leads.	Chs. 03–04, 34
2	**Document the decision rule and authority.**	One clear rule, exceptions, authenticated message protocol, succession and safe investigation process.	Chs. 04, 13, 27–28 App. C
3	**Walk and test actual conditions.**	Verified alarm effects, doors, messages, communications, occupied spaces, routes and fallback methods.	Chs. 13–16, 21–24, 29 Apps. C, E, J
4	**Teach and exercise the rule.**	Audience-specific instruction, joint tabletop, observable learning evidence and recorded gaps.	Chs. 03–04, 11, 32–35 Apps. G-I
5	**Assign, correct and retest.**	Named owner, due date, completion evidence, approval and next proof-of-life date.	Chs. 34–35 Apps. K-M

Record the first corrective action

Assumption or gap	Owner	Due date	Proof / retest

Master paper: Chs. 34–35; App. K.

HANDOFF AND LIVING RESOURCE NOTE

This decision guide, the Practitioner Field Guide and the master paper form a living practitioner resource - not a frozen endpoint. Guy M. Grace intends to update the work as Tennessee legislation and guidance are implemented and as operational experience, evidence, code interpretation, exercise results and after-action learning are obtained.

Master paper: Ch. 36; Publication Status and Source Methodology.

Put the competing-hazard rule into the EOP

Keep the complete decision bundle together: ordinary fire procedures without a known/apparent violent threat; continued reasonable protection during violence; an immediate local danger exception; and deliberate changes by authorized command.

Authority and dispatch	Record initiation, succession, approved investigation/control roles and school/public-safety coordination. Correlate fire and violent-threat information so each responding discipline receives the relevant conditions.
Location and responder access	Match the alarm zone, physical identifiers and responder maps. Verify approved access, current information, after-hours arrangements and controlled offline alternatives.
Building behavior	Record doors, fire alarm, PA/voice, monitoring, elevators, HVAC, power and network effects. Distinguish automatic output from a deliberate human decision and test how updates supersede stale messages.
People and operating modes	Carry language/access supports, backup assistance, exterior groups, buses and after-hours users through notification, protection, movement and accountability.
Receipt and action	Name staffed receivers, acknowledgement, escalation and fallback paths. Preserve an independent emergency contact method when an app, monitoring service or school leader is unavailable.

Put it into practice

Have school, fire/EMS, law enforcement, dispatch, facilities, IT and accessibility representatives explain the same scenario and identify each receiving role. Record any contradiction before finalizing the local procedure.

Master path: Master OP01-OP03, OP07-OP11; Chs. 03–04, 13–16, 21–29, 34–35; Appendices C, J, N, O and Q

Exercise a failure before relying on the plan

Hypothetical adult tabletop: lockdown is active; an automatic fire voice sounds; the principal is unavailable; cellular messages are delayed; an exterior group needs direction. Later, credible local smoke information arrives.

First decision	Participants state the full rule and respond to actual local danger. Automatic alarm output alone does not establish a human decision to end lockdown. Do not require waiting for authorization when immediate local fire conditions make the space unsafe.
Command and communication	Activate succession and an agreed PACE alternative; confirm both ends can use it. Name who sends the next update and who verifies it reaches exterior groups, drivers and people needing communication supports.
Information and access	Use panel, video, monitoring, radio and credible occupant information without unnecessary exposure. Confirm map identifiers and approved responder access. Coordinate any physical investigation through the approved incident process.
Second failure	Introduce loss of the school network or a cyber-related isolation decision. Identify safety dependencies, controlled offline information, actual door behavior and a coordinated alternative.
Movement and care	Reconcile people after any safer movement, including self-evacuated groups. Identify reachable care, accessible assistance and family-information arrangements while the incident continues.

Put it into practice

Finish with a recorded observation, an owner and alternate, an interim measure where needed, a correction and a retest. A discussion alone does not prove that devices, coverage or building sequences work.

Master path: Master OP04-OP06, OP10-OP13, OP16; Appendices E, F, K, P and R

Record readiness and keep it current

Use this local handoff record with the original first-30-days actions. Carry the record into the EOP review, joint exercise and maintenance process.

Plan record	Local procedure/version; complete rule and exceptions; authority/succession; approved investigation method; sending and receiving roles; accessible message and cancellation process.
Capability record	Current maps and access; actual building states; cellular/radio coverage; independent PACE methods; cyber/power failure behavior; offline information and backup personnel/sites/resources.
People record	Orientation for staff, substitutes and after-hours users; calm developmental student instruction; individual/access supports; family information; accountability/release and care/recovery handoffs.
Evidence record	Date, setting, participants and observed performance; message receipt/understanding; physical system behavior; failure alternative; discrepancy and operational consequence.
Correction record	Named owner and alternate; approved temporary measure; resources and due date; updated map/procedure/configuration/training; end-to-end retest and closure authority.

Put it into practice

Assign a review trigger after a material policy, building, system, staffing or partner change. Maintain routine review and testing. Preserve every original lesson and update its implementation record as local experience develops.

Master path: Master OP01-OP16; Appendices O-S; additional source alignment in Appendix T.