



BACKGROUND

School security experts agree that rapid emergency notification is of primary importance when improving school safety and when considering what kind of security measures should receive investment and resource allocation. As an integral part of an in-depth, layered approach to school security, the ability to quickly and clearly communicate vital information during an emergency is critical. Independent of the preventive and protective layers of school security, responsive measures for both day-to-day incidents and crisis events help to keep students safe.

BEST PRACTICES AND KEY CRITERIA FOR EVALUATING EMERGENCY ALERT SOLUTIONS

To optimize the safety of students, faculty, and staff, schools need to know which questions to ask of their emergency notification systems. The most effective systems will meet the following criteria:

(1) Addresses all types of emergencies, daily incidents, and crises

Is this solution able to meet a wide range of safety demands?

18M
Students are injured at schools annually

68%
of school nurses managed
a life-threatening
emergency in 2017

79% of schools have reported a crime

Educational settings have unique safety and security needs, as they face an array of day-to-day incidents that require widely varying responses. Whether handling medical emergencies, student or parent altercations, or severe weather events, it is imperative that action appropriate to the particular crisis is taken quickly for the protection of all students and staff involved.

While school shootings dominate headlines, they remain statistically rare. Steve Satterly, an analyst with Safe Havens International, states, "There is less than 1% chance that a person in a school will ever face an active shooter situation." Given the potential devastation, it is undoubtedly essential for schools to account for intruders, but not to the degree where emergency notification solutions are evaluated primarily or even exclusively through the lens of handling an active shooter scenario.

A school's chosen solution must be able to handle the vast gamut of other emergency incidents routinely faced in schools in addition to an active intruder situation. The following questions are important to consider: Does the emergency notification solution in place empower staff to quickly respond to a student having a medical emergency or a fight on the playground? How does it enable the front-desk secretary to request help without escalating a situation with an irate non-guardian demanding to see their child? What if a domestic dispute erupts next door— or in the parking lot—during student pickup? Schools can also gather their own real crisis scenarios from teachers and staff to ensure that their emergency notification solution will address all incidents they will likely face. As funding is often limited, this type of "frequency of application" consideration can also help schools to prioritize the order of their investment, allowing them to avoid spending significantly more money on solutions like bulletproof glass, gunshot detectors, vestibules in preparation of a single "worst-case scenario", while neglecting

much more common but still potentially catastrophic crises.

(2) Available to everyone, everywhere

Is this solution available to everyone, allowing them to request help no matter where they are on the campus?

"All school employees should have the ability to call a code red."

- Marjory Stoneman Douglas Public Safety Commission



The need to empower all staff to be able to request help or even initiate a lockdown from anywhere on campus is critical. While this best practice was cited in 2013 after the tragedy at Sandy Hook ("A need for all school staff to be trained, empowered, and practiced in implementing a school lockdown when appropriate without being directed to do so by a supervisor." – Campus Safety) and repeated in the MSDHS Safety Commission's report following the tragic shooting at Parkland HS in 2018, this capability is often lacking in a school's emergency action capabilities. Many solutions leave districts feeling they have this capability, but a quick set of questions and scenarios highlights gaps in the practical application.

Do you have areas within your schools (e.g., locker rooms, bathrooms, stairwells, core interior locations) or even outside that have weak or inadequate cellular or WIFI coverage? It is by far the rule rather than the exception that a school will have areas within it lacking a cellular or WIFI signal. An emergency notification system can only save lives if it's available. While apps on cell phones are extremely popular for safety solutions, there are significant challenges to ensuring every employee has good cellular coverage everywhere on campus. Additionally, these solutions also require that employee phones—often personal devices—are logged onto the school's wireless network that again must provide full coverage throughout all areas of the school.

While wall-mounted panic buttons or classroom intercom and phone devices can add value and avoid "signal issues", they offer little assistance for incidents occurring outside the school building or even across the room. The Center for Homeland Defense and Security noted that of 1,292 shooting incidents on a school campus, only 46% occurred inside a school building. Consider whether or not the emergency notification solution enables a custodian to request help from the parking lot or playground when he sees a threat coming on campus.

In short, emergency notification solutions should be available throughout the entirety of a school's campus, both indoor and out, and should empower all employees to not only request individual help, but also to initiate a campus-wide lockdown should they encounter a threat.

(3) Simple and Fast

Is the solution as rapid as it is easy to use?

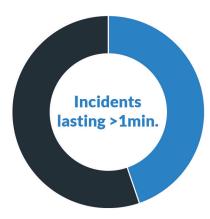
"We need to realize that time equals life. In the event of a crisis on school grounds, every minute matters."



- Lori Alhadeff, Founder of Make Our Schools Safe

Saving time is paramount in any emergency. Every second saved in an emergency—whether in the process of requesting help, providing critical information to those who need to take action, or notifying and directing responders—improves the chances for a positive outcome. The American Heart Association states that survival rates for cardiac arrest patients fall 7-10% for every untreated minute1. It is important, too, to note that an analysis of 41 school shootings between 2008 and 2017 by the Secret Service's National Threat Assessment Center found that **2/3 of attacks lasted less than 2 minutes and nearly half were over in under 60 seconds.** In emergency situations, time is of the essence.





An alert system should require very few steps to initiate, making it as easy as possible for every staff member to launch an alert. In stressful situations, a "fight-or-flight" response can significantly diminish a person's motor skills and ability to think clearly. Clicking a button can be considerably easier than logging into a program or device. Choosing among several options or working through multiple steps can be challenging and cost valuable time.

Even the time saved while accessing the alert device is valuable. Most teachers are asked to keep their cellphones out of sight while teaching. Retrieving a phone from of a pocket, jacket, purse, or even from a desk across the room can be a costly loss of time or even an impossibility in the event of an immobilizing medical emergency. Readily accessible body-worn alert devices can provide crucial time savings during events when seconds matter.

Automating information critical to responders and all those impacted by the emergency can both save time and simplify the burden on the user. Does the emergency notification solution require the person in or witnessing the emergency to verbally relay their name and location and the type of incident? Even this "simple" information can prove extremely difficult for a person under duress to formulate and for a responder to understand. Modern technology has allowed emergency notification solutions to automate many of these key factors to various levels of accuracy. Assigning a person to a body-worn device such as a badge or lanyard or to a phone app is relatively standard and allows the person's identity to be automatically captured. For critical location information, the granularity of capabilities provided within emergency notification solutions can vary wildly. Is the solution simply assuming a person is located in their assigned room or office, or is it relaying their actual location during the emergency? Is it an approximate location? Many solutions using GIS capabilities aren't able to distinguish locations to the exact room, especially if there are multiple floors in the building. Responding to Room 302 instead of Room 202 can have catastrophic consequences in a medical emergency. Providing a room-and-floor-specific location is a crucial means to ensure administrators and first responders arrive as quickly as possible, saving precious time.

(4) Communicates clearly to the entire school community

Does the solution clearly convey appropriate safety protocols to everyone impacted?

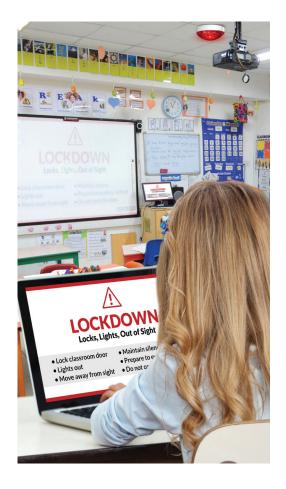
It is important in campus-wide crisis events (severe weather, active intruder, evacuation, etc.) that an emergency notification solution communicates clearly to everyone impacted. Many school safety solutions focus on the main office, law enforcement, or other teachers and staff, but don't communicate to students, volunteers, and visitors on campus. Given how critical time is, providing clear instructions to everyone involved is of the utmost importance.

Intercom announcements are often used to alert and direct people during campus-wide emergencies. Having pre-recorded announcements specific to each type of campus-wide incident



that play automatically when that type of incident is launched can ensure a clear, complete, and concise message. Trying to manually announce instructions during an emergency can result in incomplete, incorrect, or incoherent communications often spoken in a tone that increases panic. Automation also removes the necessity of for a manual intercom announcement in the event that the emergency is taking place from within the main office.

Schools should also consider that some members of the school community simply will not be able to hear announcements, prerecorded or not. Emergency notification solutions must take into account the safety of students with hearing impairments, those wearing earbuds, and those who are not indoors. Effective solutions need to communicate in multiple ways (e.g., audibly, visually, and even in writing via messages to digital displays) to ensure action is taken and specific instructions are understood. How do students away from an intercom (perhaps on the playground or practice field) know an emergency situation has occurred? Consider parents arriving to school to pick up or drop off a student. How can a notification system ensure they know an emergency event is underway? Visual alerting devices such as strobes and sirens can be invaluable in extending the reach of an emergency notification. Instructional messages displayed on digital displays, computers, phones can also be extremely beneficial to those present on campus who are not well versed in protocols (e.g., substitute teachers, volunteers, visitors) and require more complete information.



Finally, in addition to communicating extensively with everyone on a campus where a school-wide crisis is occurring, an emergency notification solution should offer the ability to provide key information (e.g., emergency type, person who initiated the alert, the exact location of the incident within the school), to off-site first responders such as local police. This varied means of communication will ensure that the entire school community has awareness of the incident and can quickly take appropriate actions to maximize the chances for a positive outcome.

¹ Link, M. S. et al. "Part 6: Electrical Therapies: Automated External Defibrillators, Defibrillation, Cardioversion, and Pacing * 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care."

