



White paper

Duress systems in K12 schools: Best practices for effective deployment

Introduction

Advocacy groups such as Partner Alliance for Safer Schools (PASS), Make our Schools Safe, Safe and Sound Schools, to name just a few, have made tremendous strides towards shining a light on the physical security of the nation's K-12 schools. A key component of physical security is the mobile duress system, which, when thoughtfully deployed, ensures help is just a button press away. However, the flip side is also true. An ineffectively deployed system can create a false sense of security and put lives at risk.

Having an ineffectively deployed mobile duress system is nearly as dangerous as having no system at all.

Depending on the school district, the responsibility for determining the best path forward most likely falls on the head of an administrator who wears multiple hats. In this paper we provide best practice guidance gathered from experts in the field to help those responsible ensure the system they deploy will be up to the task.

Trust the Experts

School district staff are experts in education, but it's unreasonable to expect them to be experts in security systems too. The first step in figuring out what your school or district needs from a duress system is to call on security experts.

One such expert might be the security integrator responsible for your intrusion, access control and video surveillance systems. Chances are they have proven experience in deploying duress systems for commercial properties, and probably even other schools.



Figure 1 School staff are already experts in education; they can't be expected to be experts in security too

If you consult a vendor, you will, of course, want to make sure that the vendor you consult is an expert in physical security. School districts have vendor relationships with a variety of service providers in the area of low voltage systems, audio/visual, HVAC, and phone and IT. While some of these may also branch out to offer security systems, many do not. You will want to make sure that whomever you consult is qualified to recommend, install and maintain a duress system.

You can also turn to your first responders. Those might include your school resource officer; local police, fire and medical responders; or those responsible for running your local public safety answering point (PSAP) and emergency dispatch center. You'll want to make sure your selection helps instead of hinders your emergency response.

Some systems available are little more than mobile phone app-based replacements for calling 911. These will connect the caller directly with 911, but in a large scale emergency, the volume of calls may overwhelm the PSAP, which, depending on the jurisdiction, may only include a handful of people able to take calls. There is also the real risk of false alarms, resulting in inappropriate emergency response which is costly to the responding agencies and can needlessly frighten teachers, staff and students.

It is a best practice to ensure a coordinated response, leveraging what you already have in place. Along those lines, PASS has published specific guidelines with respect to

monitoring duress alarms. Page 21 of the *PASS School Safety and Security Guidelines* lists centralized monitoring of duress alarms as a minimum requirement and best practice for all schools, district wide.¹ Your local responders will have valuable guidance to help lead you to the solution that's right for you.

Understand the Regulatory Standards

All versions of Alyssa's Law include a duress system.

Alyssa's Law works to address the issue of law enforcement response time when a life-threatening emergency occurs in a school.² To date, Florida and New Jersey have enacted specific versions of Alyssa's Law and legislation is pending in several other states. A federal version was introduced in 2019, but has not advanced through the legislature.

All versions of the law require a silent panic alarm system for staff and students that links directly to law enforcement, but the specifics can vary state to state. For example, the Arizona draft and New Jersey law stipulate the system must be installed by a security professional, but this is not included in Florida. Details of the system also remain open to interpretation. These include whether the system can be mobile phone app-based, or if it needs to use purpose-built panic buttons; the number of panic buttons that must be installed; as well as location capability.

With compliance with Alyssa's Law being self-declared by each provider, any system should be carefully evaluated against your regulatory standards.

Likewise, because duress systems must operate within the wider unified security system, they must be approved for use with the appropriate UL listings for intrusion and burglary detection. In addition to serving as the standard for life-safety security systems, a UL-listing will help with risk mitigation.

This is another area where your security professional can help. They will know the UL listings your system will require and be able recommend the right solution for your specific needs.

1. "PASS School Safety and Security Guidelines." Partner Alliance for Safer Schools. (<https://passk12.org/guidelines-resources/pass-school-security-guidelines/>)

2. "What is Alyssa's Law." Make our Schools Safe. (<https://makeourschools-safe.org/alyssas-law/>)

Consider the Importance of Location

In a crisis, the speed of response is often directly tied to responders knowing where the crisis is located. In a small school with a single main entrance, the precise location of a panic button activation may not be all that important; but in a larger school with multiple floors, rooms, entrances, and/or buildings, the school resource officer and other responders need to know exactly where the crisis is occurring to respond appropriately.

There are several phone-based panic button apps on the market, but cell phone coverage can be spotty and location unreliable; likewise, due to lock screens and the cell phones themselves, response times are inadequate for life safety.

Cell phone apps can help determine location through the use of GPS technology, but in-building coverage is spotty, and it is impossible to distinguish between floors. Fixed pendants mounted to walls or under desks can alleviate this problem, as they're mounted in a known location. But as staff are moving about the school during the day, these fixed devices may be out of reach. The only solution available for mobile staff is a body worn pendant with indoor location capability.

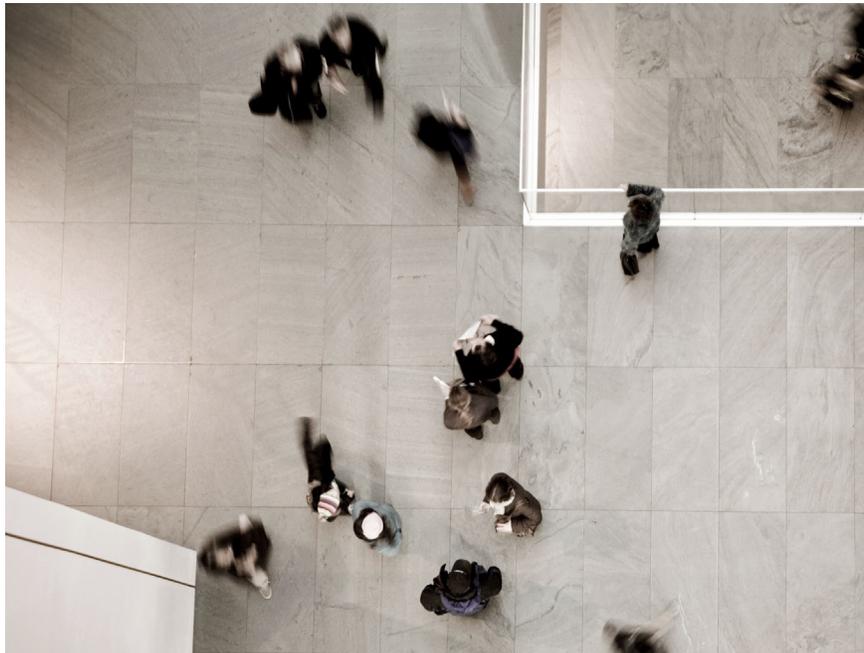


Figure 2 In larger schools, the location of an alarm must be provided to ensure an effective response

Indoor location solutions are available, and your security professionals can work with you to find the best alternative for your specific needs.

Ensure the Wireless Technology is Fit for Purpose

Reliability is the first priority for a life safety system. Everything else is secondary.

By necessity, mobile duress systems rely on wireless radio protocols to transmit alarms. But not all wireless is appropriate for a life safety system. Bluetooth is great for transmitting a signal from your phone to your earbuds; WiFi has proven to be effective for streaming media; Zigbee and Z-Wave have become the standard for home automation; and we have come to assume cellular coverage no matter where we are, even though we are often disappointed; but none of these are widely used in commercial life-safety applications. They don't deliver the level of reliability required, because life safety is not their purpose.

A life safety system requires a secure, supervised wireless network, removed from the common faults and down times that other wireless connections suffer from. Because reliability can be a matter of life and death, the wireless backbone of a mobile duress system must be fully supervised and able to withstand interference, overcome obstacles, and guarantee multiple paths from the alarm device to the receiver. There is no room for error.

Know What You Can Afford

Some stand-alone duress systems — those that are not integrable with your unified security system — can cost tens of thousands of dollars just to install the hardware, and then there may be more cost in annual recurring fees.

Ideally, your mobile duress system will be integrable with your existing security system, so that it doesn't require an entirely new technology infrastructure. If integrated into your existing security system, the recurring costs can also be relatively small additions to ongoing monitoring services you are already paying for.

When evaluating alternatives, make sure to weigh all the costs involved so that you're able to secure funding for the initial capital expenditure, as well as for any ongoing operational costs.

Summary

Every member of a school district's staff wants the same thing: To keep the members of their community safe. There are a number of tools available to do so; the trick to choose the right tool for the job at hand.



Figure 3 Keeping the members of a school safe relies on choosing the right security tool for the job.

When it comes to duress systems, consider the below as a place to start:

- Trust the experts, both your current security professionals and those responsible for responding to emergencies at your schools.
- Understand regulatory standards, including Alyssa's Law and UL.
- Consider the importance of location as it relates to the size of the schools within your district and the need for responders to know where to go.
- Ensure any wireless you consider is fit for a life safety application.
- Know what you can afford in terms of upfront and recurring costs.