



Metal Detectors in Schools

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Airports, court houses, and other locations commonly employ both “portal” or “walk-through” metal detectors and “wands” or handheld scanners to detect prohibited objects, including weapons concealed on an individual’s person, in clothing, or in belongings such as purses or backpacks. In light of increased school violence, parents and lawmakers have asked whether these devices should be more common in public schools.

1. Can installing metal detectors at campus entrances prevent school violence?

Maybe. It is reasonable to assume that a metal detector at the main campus entrance will deter many people from bringing a knife or gun inside the building. Some Texas school districts have experienced a reduction in weapons incidents after implementing metal detection programs.¹ There is no guarantee, however, that a metal detector will stop a determined individual with a weapon. In Red Lake, Minnesota, in 2005, a student shot and killed seven people at his high school, including an unarmed security guard who was operating a metal detector at the main entrance.² The circumstances of other school shootings also suggest that metal detectors, if installed, would not have made a difference.

A metal detector is only as effective as the technology and people used to operate it. It may be useful as a component of a school district’s multihazard emergency operations plan (EOP). But without procedures and planning in place to support their use, metal detectors could prove to be a costly and ineffective approach to school safety.

2. Can a school district legally require all students to walk through a metal detector?

Maybe. There is a risk that a student may challenge the district’s use of metal detection as an unreasonable search under the Fourth Amendment of the U.S. Constitution. Under both the Fourth Amendment and the Texas Constitution, students have a right to be free from unreasonable searches and seizures.³

¹ Spring ISD and Aldine ISD reported significant reductions in weapons incidents after installing metal detectors at regular intermediate, middle, and high school campuses. Jeremy Rogalski and Tina Macias, [How Effective Are School Metal Detectors](#), KHOU (June 10, 2018).

² [Teenage Gunman Kills Nine in US](#), BBC (Mar. 22, 2005).

³ U.S. Const. amend. IV; Tex. Const. art. I, § 9; *New Jersey v. T.L.O.*, 469 U.S. 325 (1985).

The reasonableness of a search under the Fourth Amendment depends on whether it is a *personal search* (i.e., a search based on suspicion of a specific person) or an *administrative search* (i.e., a random search based on a general policy or safety measure). In *New Jersey v. T.L.O.*, the U.S. Supreme Court held that a school employee’s search of a student must be based on *reasonable suspicion*, which means the search is justified at its inception (i.e., there was reason to believe the search will turn up evidence of misconduct), and the scope of the search is reasonably related to the circumstances that justified the search in the first place.⁴ In *Vernonia School District 47J v. Acton*, however, the Court recognized an exception to the requirement of individualized suspicion in the context of random drug testing of students participating in extracurricular activities.⁵ Lower courts have applied the Court’s analysis in *Vernonia* to uphold other types of general or administrative searches, such as a policy of searching all students in the course of normal daily operations, by applying a balancing test in which the intrusion involved must be “no greater than necessary to satisfy the governmental interest underlying the need for the search.”⁶ When used properly in accordance with an appropriate district policy, metal detectors can meet the legal standards of a nonintrusive administrative search.⁷

3. What have courts said about metal detectors in schools?

A Texas court of appeals upheld a search procedure at an alternative learning center that required all students entering the center to empty their pockets and walk through a metal detector. In upholding the search, the court relied on the school district’s interest in maintaining a safe and disciplined learning environment at the alternative learning center, which the court considered to be at high risk for drugs and violence. Also, all students and their parents were given notice of the procedures, and the uniform searching of all students protected against administrative abuse of discretion in deciding which students to search.⁸

Courts in other states have also upheld the use of metal detectors as a reasonable method of promoting school safety.⁹

⁴ *New Jersey v. T.L.O.*, 469 U.S. 325 (1985).

⁵ *Vernonia Sch. Dist. 47J v. Acton*, 515 U.S. 646 (1995) (upholding random urinalysis drug testing of students in district’s athletic program).

⁶ *See, e.g., In re P.P., III*, 2009 WL 331887 (Tex. App.—San Antonio 2009) (mem. op.) (upholding alternative school policy requiring students to remove shoes, socks, and belts and submit to a pat-down search before entering facility).

⁷ *See Gibson v. State*, 921 S.W.2d 747 (Tex. App.—El Paso 1996, pet. denied) (describing metal detector searches as “relatively inoffensive” and “much less intrusive than a ‘pat-down’”).

⁸ *In re O.E.*, No. 03-02-00516-CV, 2003 WL22669014 (Tex. App.—Austin Nov. 13, 2003, no pet.) (mem. op.).

⁹ *See Day v. Chicago Bd. of Educ.*, No. 97 C 6296, 1998 WL 60770 (N.D. Ill. Feb. 5, 1998) (mem.) (requiring people to walk through metal detector at board administration building was not unreasonable search under Fourth Amendment); *People v. Dukes*, 151 Misc.2d 295 (1992) (upholding random point-of-entry search of student using hand-held scanning device).

Many court decisions regarding metal detectors in schools involve locations where there is a heightened risk of violence or a documented history of weapons in the school.¹⁰ In the event of a legal challenge, the court must balance the nature of the privacy interest involved and the character of the intrusion with the nature and urgency of the school district's concerns and the efficacy of the metal detectors in addressing the concern.¹¹ School districts should work with legal counsel to document the reasons to support implementing a metal detection program.

4. Can a hand-held metal detector wand be used to randomly search students and their belongings?

Yes, as long as the search is reasonable under the Fourth Amendment. As with any search of a student, the reasonableness of a search with a hand-held metal detector wand depends on whether the search is administrative (i.e., random) or personal.

Texas law does not specifically address random searches of students using handheld wands, but courts in other states have upheld this practice.¹² In Florida, the Dade County School Board adopted a policy and procedures for students to be randomly searched in the classroom with hand-held metal detector wands. Signs throughout the schools notified students of the random searches. The private security firm hired by the district arrived at a randomly selected secondary school and rolled dice to select a sector and classroom to search. When the search team arrived at a classroom, accompanied by an administrator, a team member notified students of the search procedures and ordered them to remove all metal objects from their pockets. The students were then scanned by a security team member of the same gender as the student. The team also scanned the students' backpacks, coats, and other belongings.¹³

When a student challenged the district's search policy, the Florida state appellate court applied the U.S. Supreme Court's balancing test from *Vernonia* and upheld the policy as reasonable. The court found that students at school have a lesser privacy interest than the general population, and the board's policy and guidelines minimized the intrusion of the random searches on a student's privacy interests. The court also found that the board's concern for the safety of its students and employees justified the random search policy, noting that the school district had confiscated from students a very high number of weapons, including handguns, in the year before implementation of the policy. While the district could have installed walk-through metal detectors as an alternative method,

¹⁰ See *People v. Dukes*, 151 Misc.2d 295, 300 (1992) (noting that school records documented recovery of over 2000 weapons in the 1990-91 school year and a recent fatal shooting in a nearby high school). *But see In re F.B.*, 555 Pa. 661, 672 (1999) (finding the "interest in keeping weapons out of public schools is a matter so obvious that the need to develop a record on this point is superfluous").

¹¹ See *Vernonia Sch. Dist. 47J v. Acton*, 515 U.S. 646 (1995) (applying three-part balancing test to random urinalysis drug testing of students in district's athletic program).

¹² *In re F.B.*, 555 Pa. 661 (1999); *State v. J.A.*, 679 So.2d 316 (Fla. Dist. Ct. App. 1996).

¹³ *State v. J.A.*, 679 So.2d 316 (Fla. Dist. Ct. App. 1996).

the Fourth Amendment does not require adopting the least intrusive search possible. The court concluded that the board had chosen a method of addressing the weapons problem that was most appropriate for its open-campus high schools.¹⁴

In contrast to the Florida example, searching a specific student outside of a district's administrative search procedures would require reasonable individualized suspicion.

5. What other legal risks exist with regard to metal detectors in schools?

In order to be considered an administrative search, metal detectors must not be used in a way that is selective, based on stereotypical assumptions, or biased.¹⁵ District procedures can require the staff operating a metal detector to follow a strictly prescribed methodology when conducting searches, in order to reduce the risk of abuse of discretion.

Also note that criminal searches conducted by law enforcement officials must be based on *probable cause* that a violation of law has occurred—a higher standard than the reasonable suspicion needed for a school search.¹⁶ A confirmed activation of a walk-through metal detector on a student would likely be sufficient to provide reasonable suspicion, thus allowing the student to be pulled aside and individually searched in a more private area, preferably by a trained district official of the student's gender. Whether there is probable cause for a police officer, including a school resource officer (SRO), to search a student is a decision best left to the officer.

Contrary to popular belief, a U.S. Department of Justice report on school security technologies indicates that metal detectors are “usually not effective” with backpacks, purses, and other containers capable of holding multiple objects.¹⁷ Therefore, school employees cannot rely on the machine to locate every prohibited item. There is no substitute for adopting legally defensible search procedures and training staff on how and when to search a student or the student's belongings.

6. Could a district be sued if someone with a weapon gets past its metal detectors?

School districts in Texas have strong immunity protections against personal injury claims, particularly when the claim is based on conduct by a third party. Therefore, the chances of a successful lawsuit based on a district's failure to protect its students or employees are slim. Nonetheless, districts should be aware of the potential risk of claims.

¹⁴ *State v. J.A.*, 679 So.2d 316 (Fla. Dist. Ct. App. 1996).

¹⁵ *See, e.g., People v. Parker*, 284 Ill.App.3d 860 (1996) (granting student's motion to suppress evidence where police officer at high school detained him and ordered him to walk through metal detector based on a hunch that he was concealing something).

¹⁶ *See New Jersey v. T.L.O.*, 469 U.S. 325 (1985) (finding the school setting requires modification of the general rule that searches must be carried out based on probable cause to believe that a violation of law has occurred).

¹⁷ National Institute of Justice, [The Appropriate and Effective Use of Security Technologies in U.S. Schools: A Guide for Schools and Law Enforcement Agencies](#) (Sept. 1999).

In *Johnson v. Dallas Independent School District*, a parent sued Dallas ISD and a principal after his son was killed by a stray bullet shot by a non-student in the hallway of the A. Maceo Smith High School. The killer entered the campus without wearing the district's required student ID badge. Although the district had placed metal detectors at the campus, they were packed away in boxes, unused, therefore no one discovered the killer's concealed handgun. The parent's lawsuit against the district was based on two legal theories. First, he argued that the district and principal had violated his son's constitutional rights by affirmatively creating a hazardous environment that led to his death ("state-created danger theory"). He also argued that the district had failed in its constitutional duty to protect its students based on the special relationship arising from compulsory attendance laws ("special relationship theory").¹⁸

The Fifth Circuit Court of Appeals rejected both of the parent's legal theories, reasoning that the district and principal were, at worst, simply negligent in failing to deploy available security measures. The student's death was not the result of "school officials' deliberate, callous decisions to interpose him in the midst of a criminally dangerous environment"; as such, there was no state-created danger.¹⁹ The court also determined that the district had no duty to protect its students from harm by a non-student, a conclusion that the court has affirmed in more recent cases regarding bullying and sexual abuse.²⁰ A dissenting judge in *Johnson* argued:

If the school had not completely disregarded its security measures, Brown might have been prevented from roaming the school halls and his gun might have been detected. Indeed, this lawsuit might never have materialized, and Gaston would have finished his studies at A. Maceo Smith High School.²¹

A lawsuit against a school district based on failure to detect a weapon with metal detectors would face significant legal barriers, but almost every school shooting has resulted in litigation. TASB Legal Services recommends discussing these issues with the district's school attorney.

¹⁸ *Johnson v. Dallas Indep. Sch. Dist.*, 38 F.3d 198 (5th Cir. 1994).

¹⁹ *Johnson v. Dallas Indep. Sch. Dist.*, 38 F.3d 198, at 202 (5th Cir. 1994).

²⁰ *See Doe ex rel. Magee v. Covington Cnty. Sch. Dist.*, 675 F.3d 849 (5th Cir. 2012) (en banc) (affirming school district did not have a special relationship with students based on compulsory attendance and, therefore, could not be held liable in Section 1983 lawsuit for failure to protect student from sexual abuse by third party).

²¹ *Johnson v. Dallas Indep. Sch. Dist.*, 38 F.3d 198, 204 (5th Cir. 1994) (Goldberg, Circuit Judge, dissenting).

7. Are there practical downsides to using metal detectors?

Yes. Walk-through metal detectors are very costly to install and maintain. According to the U.S. Department of Justice, metal detectors appropriate for a school setting cost between \$4,000 and \$5,000.²² A news report in 2018 estimated that installing metal detectors in all Texas schools would cost upwards of \$46 million.²³ In addition, the U.S. Department of Justice advises that “[t]he initial purchase price of a portal metal detector is almost insignificant compared with the ongoing personnel costs to operate the equipment in a complete weapon detection program.”²⁴ Implementing routine use of metal detectors at school requires a significant commitment of school resources and staff time.

Metal detectors may also have an undesirable impact on school operations. As anyone who has flown in or out of a major airport can testify, the requirement to walk through a metal detector can create major traffic jams during peak times. Schools using metal detection at campus entrances may need to stagger start times for the first period. Students lined up outside the main doors could present a fire hazard. Additionally, while students are waiting to get inside, there is an inherent danger in that they are left vulnerable to threats outside the building.

School officials can address these unintended consequences with advance planning. For example, campus procedures can provide methods to streamline metal detection during peak times, such as by selecting every third person to walk through the portal. The district should ensure that local and regional partners, including fire and law enforcement agencies, are informed of a proposed plan to use metal detection, and administrators should walk through the campus with representatives of these entities and other safety experts to inspect all points of entry and ensure the necessary space requirements and layout.

8. Who should be subject to metal detection at a campus entrance?

Metal detectors will not keep weapons out of school if they are easily bypassed. In order to maintain the integrity of the district’s security measures, everyone—parents, staff, students, and visitors—would ideally be subjected to the same requirement when entering the building. A district’s local policy and procedures can specify the scope of its metal detection program. For example, many districts may decide to use metal detection with students and visitors at secondary school campuses and district-sponsored events off campus. As a matter of common sense, an exception applies to a sworn police officer or a school district official authorized to carry a firearm on district

²² National Institute of Justice, [The Appropriate and Effective Use of Security Technologies in U.S. Schools: A Guide for Schools and Law Enforcement Agencies](#) (Sept. 1999).

²³ Kate Weidaw, [What it Costs to Outfit Texas Schools with Metal Detectors](#), KXAN (May 21, 2018).

²⁴ National Institute of Justice, [The Appropriate and Effective Use of Security Technologies in U.S. Schools: A Guide for Schools and Law Enforcement Agencies](#) (Sept. 1999).

property. If a district board of trustees has authorized a campus employee to carry a concealed firearm, then part of the plan to install metal detectors should entail a procedure for this individual to go in and out of the building without revealing the weapon. Ideally, school employees or parent volunteers will be stationed near the doors during drop-off and pick-up times, to ensure that everyone who comes on campus walks through the main doors with the metal detectors.

Prominent signage at the entrance of the building may help to motivate compliance with the district's procedures. Districts may also hold an information campaign to inform the community of the reasons for installing metal detectors and to explain how metal detection fits within their comprehensive safety procedures. While parents and employees generally support efforts to keep children safe at school, school officials should not be surprised to encounter some opposition if there is a perception that the school environment is becoming overly "criminalized," or feeling like a correctional institution rather than a place for learning. District officials should carefully consider these issues when deciding whether a metal detection program is appropriate for their communities.

9. How should a school district document its decision to use metal detectors?

As a key feature of a district's security measures, a metal detection program should be included in the EOP.²⁵ In addition, TASB Policy Service provides recommended language at TASB Model Policy FNF(LOCAL), regarding student investigations and searches, explaining that the district may use metal detection at campuses and off-campus, school-sponsored activities.

Outlining the parameters for a district's metal detection program in board policy will serve as legal documentation of the district's intent to institute fair and effective procedures that are designed to provide security without compromising individual rights or the educational process. The district's policies are also one way to provide notice of the district's search procedures. In addition, the TASB Model Student Handbook is designed to refer to a district's metal detection policy to provide further notice to students and parents.

10. What procedures should we put in place for using metal detectors on campus?

This is not a comprehensive list, but here are a few considerations for planning and developing a metal detection program. Use this as a starting place and work with local law enforcement officials, security experts, and the school district's attorney to develop procedures appropriate for your district.

²⁵ See Tex. Educ. Code § 37.108(a) (requiring each district to adopt and implement a multihazard emergency operations plan for use in the district's facilities). See also TASB Policies CKC(LEGAL) and (LOCAL).

- *What type of metal detectors?* If the goal is to scan every person entering a building, using handheld scanners alone presents a practical challenge. On the other hand, wands can be more precise than walk-through metal detectors. Some locations use both types of devices.
- *Who will operate the metal detectors?* Typically, districts do not want to constrain their SRO to this post because he or she is needed to patrol the campus and respond to emergencies. Other campus staff (administrators, security guards, or even teachers) can be trained by either law enforcement officers or the vendor. As a best practice, at least two people are usually assigned to operate a metal detector. Consider training additional staff as backups in case of absence or turnover.
- *How will staff be trained to use the metal detectors?* Training should include how to recognize when the metal detectors are not working, what to do when the metal detectors are activated, and detailed training on the district's search and emergency procedures.
- *When and where will the metal detectors be activated?* Many school districts already have metal detectors at the alternative campuses. If your district is considering beginning or expanding a metal detection program, consider which locations will receive metal detectors (e.g., just the high school campus, other campuses, district administrative offices, other buildings) and when they will be turned on. Some school districts use metal detectors routinely, while others may use them only at special events or when there is a heightened concern.
- *What to do when there is a logjam?* During peak times, searching every person who enters the building may not be feasible. Your procedures should provide employees with a method of random selection to streamline this process. Randomized patterns are preferable in order to avoid administrative discretion. Avoid establishing an obvious pattern.
- *How do we ensure people have to walk through the metal detector?* When determining the procedures for a metal detection program, take the opportunity to tighten district procedures for ensuring safe entry and exit, especially during peak times. As discussed above, metal detection at the main entrance is pointless if it is easy to enter through another door.
- *What to do when the metal detectors break down?* Walk-through metal detectors occasionally break down, and repairs can be expensive. This needs to be part of the district's financial planning.
- *How will people be notified of the metal detectors?* If the district intends to search upon entry to a building, prominent signs at every entrance should inform all visitors that they may be required to walk through a metal detector. As a best practice, districts should also notify students and parents at the beginning of the school year that metal detectors may be used.

Metal detectors should be used in conjunction with other best practices in school safety. Remember, a person determined to do harm may not be deterred by a metal detector. Every campus employee and regular volunteer can be trained to recognize indications that a student or other person poses a threat. This includes training bus drivers, crossing guards, cafeteria workers, and even before- or after-school program staff, as these individuals may have an opportunity to observe students in a less formal setting. Train your employees, students, and community to recognize the importance of adherence to your security procedures. Be vigilant to safety risks; do not allow the presence of technology to instill a false sense of security.

Takeaways

Metal detectors can be an important part of your district's security procedures, but do not rush in. Document your rationale for installing and using metal detectors with students. Understand the budgetary and personnel commitments necessary to support a metal detection program. Develop strong policies and procedures and revisit them regularly.

For more information regarding metal detectors and other school security measures, see:

- [TASB's School Safety and Emergency Management](#) eSource website.
- [Texas School Safety Center](#) website.
- [TEA's School Safety Resources](#) website.
- Gov. Greg Abbott, [School and Firearm Safety Action Plan](#) (May 30, 2018).

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