This American School and University supplement theme issue provides information from experts in the security industry concerning school violence and its prevention. Articles address the lessons learned from recent school shootings that may help reduce future occurrences, the need for a greater adherence to order in schools to set the stage for a more secure learning environment, the use of identification badges, and ways of conducting a school facility security audit. It explains how to determine which technology is most important for school security, the development of a crisis management plan, and the preplanning steps that helped one community deal quietly with a rash of bomb threats. (GR)
UNDER SIEGE
Schools as the new battleground

Strategies to protect students, staff and facilities

A special supplement to

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A Message from The Editors

When shots rang out in Littleton, Colo., on April 20, 1999, the face of school security changed forever. The ghastly events at Columbine High School were far from the first incidents of school violence, but by combining a cold calculation and shocking body count, they defined a terrifying new era in school violence. It's an era when violence is both random and carefully executed, ambitious and without conscience, horrifically deadly and yet perpetrated by the child next door.

Panic spread throughout the country as parents contemplated the scary ramifications of the widespread media reports. While empathizing with the bereaved parents in Colorado, they also knew the scariest part of all: It could have been their neighborhood school; it could have been their sons and daughters.

School administrators and security personnel have been shouldered with the responsibility of finding ways to keep students safe. Statistically, of course, schools are among the safest places of all, yet statistics seem hollow comfort in the wake of violence. What parents want — and what the country demands — is a solid plan to ensure school safety.

To provide the most up-to-date and expert information to professionals entrusted with this important work, we have compiled this special supplement. It is the result of a first-time collaboration of the staffs of American School & University and Access Control & Security Systems Integration magazines. Our goal is to combine resources of both magazines' staffs with the best information experts in the security industry have to offer, and with the lessons learned by peers in the education community. In compiling this information, the editors were struck both by how far schools have come in assuring students' safety, and also by how far they have to go. More than one Columbine-type incident has been averted by their efforts, and yet many students are still vulnerable — evidenced by the rash of copycat incidents following the Littleton tragedy.

We would like to thank the many people who have taken part in this special supplement, including the sponsors, the contributors and the school officials who allowed us to tell their stories. We hope the information presented here can play a role in furthering efforts to protect America's children.

Joe Agron
Editor-in-Chief
American School & University

Larry Anderson
Editor/Associate Publisher
Access Control & Security Systems Integration

Best Copy Available

The changing face of school violence
Recent horrendous events in the nation's schools highlight an ugly new chapter in school violence — and the need to redouble efforts to protect students from harm.

Lessons learned
After a wave of recent shootings, administrators are implementing strategies that hopefully will lessen the chances of similar incidents.

Critical elements in school security
Violence occurs at greater levels in schools where minor infractions of school policy are ignored. Promoting order sets the stage for a secure learning environment.

Suburban Kansas City schools use ID badges

School resource officers are more than security guards

Conducting a school facility security audit
It's the first step in solving the equation of people, procedures and hardware.

SafeKids program donates CCTV equipment

The ABCs of security technology
Technology offers a number of tools that can help construct a school security system. But which tools are the most important and how do you evaluate them?

Crisis management:
Every school needs a plan
Don't be caught flat-footed in the face of a tragedy because you don't have a plan in place.

Bomb threats exploding
Pre-planning helps a rural community deal quietly with a rash of bomb threats.
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The changing face of school violence

Recent horrendous events in the nation's schools highlight an ugly new chapter in school violence — and the need to redouble our efforts to protect students from harm.

By MIKE KENNEDY

Gunshots echo through the hallways, and the news quickly spreads to panic-stricken students and staff that the school is under siege. Hundreds of lives are at risk, and they anxiously wait for your instructions.

You can tell them to lock themselves in their classrooms — that might keep the attackers away — but it could also leave students and faculty in harm's way.

You could order them to flee the building, but you could be unwittingly sending them into the line of fire if snipers are perched outside, waiting specifically for such a mass exodus.

"It has happened both ways," says Dan Reyes, supervisor of school police in the Clark County, Nev., School District. "You can't predict what's going to happen. The pendulum can swing either way. It can swing both ways."

Those are the nightmarish scenarios school officials have been sweating over in the wake of yet another horrifically deadly school shooting.

At Columbine High School in Jefferson County, Colo., two students armed with guns and homemade bombs killed a teacher and 12 students, and wounded more than 20 others before taking their own lives.

The shocking events in Colorado on April 20, 1999, have had school administrators poring over their programs and procedures to see if they can do anything more to avoid or prevent such a gruesome event.

But even districts with stringent security and an array of intervention and prevention programs acknowledge uneasily that the most comprehensive plans cannot foresee every possible catastrophe.

"There are no guarantees," says Reyes.

A grim timeline

Even before Columbine, anyone following the headlines in the last couple of years can see that schools are susceptible to the same spurts of insane violence that occur elsewhere in society:

- Oct. 1, 1997, Pearl, Miss. A 16-year-old student at Pearl High School shot two students to death and wounded several others near the school after fatally stabbing his mother at home.
- Dec. 1, 1997, West Paducah, Ky. A 14-year-old student opened fire on a prayer meeting before school and killed three students and wounded five others.
- March 24, 1998, Jonesboro, Ark. Two students, 11 and 13, fired upon students and teachers outside Westside Middle School after pulling the fire alarm. Four students and a teacher were killed, and 10 others were wounded.
- May 21, 1998, Springfield, Ore. A 15-year-old student killed his...
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parents at home, then headed to Thurston High School, where he fatally shot two students and wounded 22 others.

Those involved in school safety point out that despite these awful episodes, the roughly 47 million students who attend public schools in the United States are generally in secure surroundings.

"Kids are safer in school than anywhere else in America," says Reyes. "But I'm not downplaying the tragedy in Colorado or saying we can ever let our guard down."

**Saying no to guns**

In many schools, keeping the guard up means extensive efforts at keeping guns out.

"What has changed over the years is young people's accessibility to guns," says Curtis Lavarello, a police officer with the Palm Beach County, Fla., schools and executive director of the National Association of School Resource Officers. "There were fights when I was in school, but when it ended it was over. Now kids have accessibility not only to weapons, but to high-powered firearms."

The role of school police has also evolved.

When Reyes started as a security officer in Las Vegas with Clark County Schools in the early 1970s, the force was part of the district's maintenance department and focused on protecting property from vandals.

About 10 years ago, the district recognized it needed to expand the security force's mission. The department became a full-fledged police force and was moved from the maintenance department to the alternative education department.

"We became more people-oriented instead of object-oriented," says Reyes.

Now there are two officers in each of the district's 28 high schools and more than 100 working for the district.

Clark County also places a top priority on getting guns out of schools.

"You can have gang members, drug dealers, kids rejected by their peers," says Reyes. "The common denominator is guns. A gun can result in an instant killing."

The district has a 24-hour hotline for students to report weapon sightings or other potential crimes. It uses peer mediation to resolve student conflicts before they escalate into violence.

Posters are displayed throughout schools, students are given ID cards on which they pledge not to carry a gun, and television stations run public-service announcements conveying the message: zero weapons, zero tolerance.

The efforts seem to be working. In 1991, the district had about 130,000 students and 132 reports of guns in schools. This year, the district has grown to 200,000 students, yet as of mid-May, only 47 gun-related incidents have been reported.

**Looking for answers**

Since the carnage at Columbine High School, communities around the country have looked at ways of becoming more vigilant about security in and around schools:

- California Gov. Gray Davis has proposed spending $100 million of a budget surplus to strengthen school safety programs in his state. The money would allow districts to hire more counselors, update school safety plans, and purchase more metal detectors, video surveillance and other security devices.

- Davis also has urged cellular phone companies to follow the lead of AirTouch Cellular, which announced plans to donate 10,000 cell phones and free airtime to high-school classrooms in Los Angeles, San Diego, Orange and Sacramento counties.

- A bill in the California General Assembly would require schools to have a phone in all newly built classrooms.

- Washington Gov. Gary Locke wants legislators to allocate $9 million for a grant program to improve school safety. Districts would have flexibility to spend the grants depending on their own needs.

- In Wisconsin, two legislators have proposed that spending on security and safety measures be exempt from fiscal limits placed on schools.

- In Georgia, Schools Superintendent Linda Schrenko has proposed that the state impose a tax on violent movies and video games to help pay for additional school security.

- In San Francisco, Mayor Willie Brown is asking for an additional $1.5 million in his budget to put 26 more police officers in the city's public high schools. The added officers would augment the 56 officers already deployed at San Francisco schools.
Percent of public schools reporting various types of security measures at the schools: 1996-1997

<table>
<thead>
<tr>
<th>Security Measure</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitors sign in</td>
<td>96%</td>
</tr>
<tr>
<td>Closed campus for most students during lunch</td>
<td>80%</td>
</tr>
<tr>
<td>Controlled access to school building</td>
<td>53%</td>
</tr>
<tr>
<td>Controlled access to school grounds</td>
<td>24%</td>
</tr>
<tr>
<td>One or more drug sweeps</td>
<td>19%</td>
</tr>
<tr>
<td>Random metal-detector checks</td>
<td>4%</td>
</tr>
<tr>
<td>Students pass through metal detectors daily</td>
<td>1%</td>
</tr>
</tbody>
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Source: U.S. Department of Education

football games and other athletic events, but does not have them in its school buildings.

"You have to go with what the public demands," says Reyes. "I don't think the community would agree to spend millions of dollars to set up metal detectors."

Lavarello also is not persuaded that metal detectors are effective in preventing trouble. His experience shows that person-to-person community policing is more effective.

"Do we want to make schools like airports, where students have to show up two hours before school starts?" says Lavarello. "We find more weapons by word of mouth, by knowing what is going on in the school."

Word of mouth at Holland Woods Middle School in Port Huron, Mich., helped authorities crack an alleged conspiracy in May that could have resulted in Columbine-like carnage. Two students tipped off a school official that four other students were planning to stage an attack similar to the one in Colorado. The plot was foiled, and the suspects were arrested.

Many schools have embraced the resource officer concept, in which a police officer in effect becomes a de facto faculty member as a full-time presence in the school.

"We're out there coaching, giving classroom presentations," says Lavarello. "We're another set of eyes and ears looking out for warning signs. We can't just react to events; we have to be proactive. We can put out fires, but how long will they stay out? We should be trying to prevent the fire from occurring."

"Some school officials are reluctant to bring police onto their campuses," says Lavarello. "They view a law-enforcement presence as an admission that they can't maintain order on their own."

"The schools can't do it alone," says Lavarello. "We have to forge relationships between school and police."

Lavarello bristles when people find out his assignment and tell him, "Isn't it a shame we have to have police on campus?"

"If I told you that you would have a police car patrolling your street all night long, wouldn't you feel safer?" says Lavarello. "Wouldn't you want that for your children's school, too?"
After a wave of recent school shootings, administrators are implementing strategies that hopefully will lessen the chances of similar incidents.

By JOE AGRON

On the heels of Columbine and other recent violent episodes in our nation's schools, once-tranquil education environments are being put under the microscope. While many see schools as new targets for terror, the reality is schools are still among the safest places for children — and administrators are doing everything they can to ensure their continued safety.

"The school environment should be a safe environment for staff and students," says Bill Adams, superintendent, Salem County Vocational Technical Schools, Woodstown, N.J. "And that means students should be able to come to school and not be concerned about internal or external forces that are going to preclude them from learning, or that might injure them in some way. The same sense of security has to apply to staff, as well."

While schools in Salem County have had various threats of violence, most of the cases have been hoaxes. Districts in the county, however, have been plagued by numerous bomb threats. The Vocational Technical Schools have not received any to date. Adams is quick to note that it is not to say that it couldn't happen.

"The Columbine tragedy increases the responsibility that we, as school administrators, have to take for the safety of our students and staff. It also has changed the way that we have to act," says Adams.

"I honestly believe that what we do in our schools in terms of trying to create a safe learning environment, and a safe environment for students and staff, will never be the same."

A mounting concern

Even with the Columbine tragedy fresh in everyone's minds, numerous copycat and other potentially violent incidents continue to plague schools. School administrators are scrambling to review security and crisis-management plans, and federal and state lawmakers are intensifying efforts to address school violence, including proposing new initiatives to combat juvenile crime, guns in schools, and to implement early-intervention programs.

But savvy administrators are quick to point out that there is no one answer to providing a safe school environment.

"People want a simple solution, but there isn't one," says David L. Lusk, superintendent of the 32,000-student Conroe Independent School District in Texas.

Conroe has a progressive security and safety infrastructure in place, including a fully staffed police force with 40 certified, armed officers; three detectives; a Gang Intervention Unit; and a drug/ammunition-detection K-9 unit. (In 1989, the Texas State legislature passed a statute allowing districts to form their own police departments.)

But no matter how well prepared, Lusk says that no plan is foolproof.

"The Columbine incident could only have been prevented by students, parents or citizens coming forward and sharing information with school police..."
or school officials,” says Lusk. “It is now common knowledge that in all of the national incidents [Jonesboro, Ark.; West Paducah, Ky.; Pearl, Miss.; etc.] prior to Columbine, someone knew something about what these students were planning, but didn’t share it with school police or officials.”

To better open the lines of communication, Conroe established two years ago an anonymous hotline where students, parents or anyone else in the community can report suspicious or unlawful activity or plans in its schools. The program — Safe School Crime Stoppers — offers a reward if the tip results in an arrest or the prevention of a crime. It is heavily publicized to students, parents and the community.

“While we are a district that has taken a proactive role in working to provide safe schools, we know that violence [such as at Columbine] can happen anywhere, at any time,” says Lusk. “We will continue to monitor the effectiveness of the programs we have in place and do all we can to ensure that we provide the safest schools possible. This involves the commitment of everyone involved — schools, students, businesses and community organizations.

An easy target
While Columbine was the most sensational, schools prior to and since that fateful day in April have experienced a number of violent and potentially violent incidents. For example, since Columbine:

- Schools in Allen, Texas, canceled the remaining two weeks of classes due to repeated bomb threats. After parental and community outrage, officials opened schools on a limited basis a few days later.

- Four boys were charged with plotting a shooting in their Port Huron, Mich., middle school similar to the massacre at Columbine. The plan was discovered after a female classmate overheard the boys talking about the killing spree.

- A student opened fire on classmates, wounding six, in a Rockdale County high school located in a suburb 20 miles east of Atlanta.

“Schools have always been easy targets for violence, and they are easy targets because they are public and that makes them extremely vulnerable,” says Peter D. Blauvelt, president of the National Alliance for Safe Schools. The Alliance was established in 1977 primarily to provide technical assistance to school districts around the country in the area of school crime and violence prevention.

“When we really analyze what has happened in the last two years, a common thread is that school shootings occurred in communities in which people felt safe. So, all of a sudden, it has created in all of us this anxiety that if it could happen there it could happen here,” says Blauvelt. “If we can finally put to rest the notion that it can’t happen here, then schools and communities will begin to realize that they need to begin to at least take a look at their buildings, at their procedures, and start to implement some procedures that begin to tighten things up a little bit.”

Tools of the trade
While the perception of schools as safe havens has changed since the rash of shooting incidents over the past two years, the fact remains that schools still are the safest places for children. However, even though the number of violent incidents in schools is dropping, the strength of the firepower used by students is growing. A number of experts cite that the Columbine tragedy could signal a shift in scope of student attacks.

“What happens when we have a case such as Columbine, or Paducah, or Pearl, or Jonesboro, is that it creates doubts in all of our minds as to whether
or not our particular school — the one our children go to — is safe,” says Blauvelt. “And there is a tremendous amount of pressure being brought upon educators today, forcing them to make responses and spend money for hardware that they really don’t need and don’t know quite how they are going to use. But they feel almost compelled to have it.”

Metal detectors, security cameras, ID cards, and other security hardware and systems are finding a home in the nation’s schools, largely due to the need to show students, staff and parents that security measures are being implemented.

Conroe, which is growing by 1,400 students per year, uses ID cards in most of its junior- and senior-high schools. It also uses hand-held metal detectors, as well as random walk-through systems. But administrators are quick to point out that technology is not a panacea.

“It is important to note that metal detectors would not have mattered in Columbine, where the violence started outside in the parking lot and then continued inside the school building,” says Bill Harness, Conroe ISD’s chief of police. “Metal detectors are useful, but are only part of the solution. We must look at other prevention/intervention methods, such as the tip line or early intervention.”

“We are continually evaluating our prevention and intervention programs,” continues Harness, “and we seek input from our community on these issues.”

Savvy administrators are quick to point out that there is no one answer to providing a safe school environment.

“We have always felt that schools are places that should be open environments and, thus, none of our classroom doors were locked,” says Adams. “But in an emergency situation, teachers are supposed to lock their doors, bring students to inside walls, get them away from windows, and so forth. That’s great, but the teacher has to go out in the hall to lock the door. What if someone is out there with a gun?” says Adams.

“After all, safety is not a sometimes thing, its an all-the-time thing.”

Joe Agron is editor-in-chief of American School & University.

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Conroe ISD’s hotline offers a reward if the tip results in an arrest or the prevention of a crime.
Schools are a reflection of society. For the most part, the behaviors displayed by students in a specific school will be a representation of the attitudes, values and morals existing within the community the school serves.

Schools also are breeding grounds for natural generational changes in behavior. We do not view the world as our parents did, and the children in school today do not view it as we do. We are a society of order, but we are also a free society. The real challenge school security programs face today is establishing a balance between the two.

It is unrealistic to expect students to behave orderly in school simply because that is where they are. Unless there is some cosmic intervention taking place on the bus ride to school each morning, school officials cannot expect individuals who were engaged in drug-related activities, burglaries, thefts and various acts of violence the evening before to act any differently when they arrive at school without a formal program in place.

The most damaging thing a school official can do regarding school security is to deny there is a need for it in his or her school. As many of us became aware of the unfortunate incidents that occurred in schools in Littleton, Colo., West Paducah, Ky., Jonesboro, Ark., and several other communities throughout the United States, more people accepted the fact that school violence can occur anywhere, even in their schools.

These issues are critical elements in school security. School must be a place where children can go to pursue learning and express themselves in healthy, productive ways. It must also be an environment where they may learn, and teachers and others who assist them in learning may do so safely and without the fear of danger.

Assessing the physical plant
In March 1982, criminologist James Q. Wilson published his now famous paper entitled "Broken Windows." In that article, co-authored by George Kelling, Wilson presented his theory that crime sprouts in disorderly environments plagued by broken windows, graffiti and similar disruptions because criminals get the message no one cares what happens there. He discussed the Safe and Clean Neighborhoods Program introduced in the mid-1970s in New Jersey as one of the early attempts to respond to "quality of life" offenses and improve conditions in 28 cities in that state.

Realizing the impact facilities have
on security, and that most schools in existence today were built without much consideration for security issues, school officials should assess all buildings and services provided. A physical examination of the school campus will identify security shortcomings and allow for recommendations to overcome them.

For example, a school might have been designed to include one or more "L-shaped" wings as a means of maximizing land use. Unfortunately, when the architect submitted plans to meet that challenge, little concern was shown toward the security breach being established in the area located at the short end of the wing. School officials forced to work in such a structure today must exert increased efforts toward monitoring that area. A security assessment will point out the deficiency and make recommendations to improve it.

Quality-of-life issues

Just as Wilson theorized that serious crime flourishes in areas where minor offenses go unchecked, it can be rationalized that violence occurs at greater levels in schools where minor infractions of school policy are ignored. In a school where wandering the halls during class, or using profanity is not allowed, students have little difficulty with recognizing more serious forms of behavior will not be tolerated either. On the contrary, in a school where teachers and other school officials do little to enforce such policy infraction, students are more likely to engage in threatening, assaultive and other more serious forms of undesired behavior.

Ironically, officials in schools where minor issues are not addressed often turn to technology in seeking the answers to their problems. They have cameras installed, purchase metal detectors and enhance the locks on the school's exterior doors. Unfortunately, taking those steps alone usually produces limited results.

All school employees must accept responsibility for making their school safe. By demonstrating such attitudes, students will begin to care more about their school and take ownership in addressing security breaches.

Technology can assist in meeting some of the needs of a school security program, but the attitudes of people are most important. With or without technological devices, a secure school must be used by secure-conscious students and staff who do not condone any level of school-policy transgression.

Suburban Kansas City schools use ID badges

By GEORGE PARTINGTON

The Olathe School District in suburban Kansas City, Kan., has installed an ambitious ID badging program.

About 10,000 students at the nine secondary schools use photo ID cards with magnetic stripes and bar codes to access doors, purchase meals in the cafeterias and check out material from the library.

As a safety and security measure, all 3,500 teachers and staff members wear photo ID badges at all times during work and other district functions. Students are not required to wear their badges, but those who wish to are provided with lanyards or clips.

The cards do not store value, but instead interface with readers that in turn are connected to the school-wide computer system, which keeps track of library and cafeteria accounts and other data.

ID badges are produced using a digital camera and Quick ID software produced by Display Technologies, Kansas City, Kan.

"The whole process takes about a minute, by the time the picture is taken, data is entered and the card is printed," says David Madden, Olathe District Schools cafeteria systems support. Madden is leading the effort to bring all secondary school cafeterias on line with the card system.

The systems' speed is especially useful during registration, when thousands of new ID cards are produced.

"We built that software so we could have multiple captures off of the same database, so we can set up three or four computers and cameras and have the students' pictures taken and information entered in a 15-20-second period," says Display Technologies president Phil Stewart. "Then you can take all of the images and merge them without any conflicts. We can run 120 captures an hour easily."

Images are captured using a flexible-neck camera originally designed to be a microscope adapter. "It looks like a microscope, and takes up a 5x7-inch footprint on the desk," Stewart says.

The camera has a contrast button, so users can lighten or darken the picture.

Badges are designed using a drag-and-drop interface and printed on Fargo Pro printers, which are designed for high-volume applications. The printers produce dual-sided cards printed edge-to-edge. Bar codes and magnetic stripes are encoded during production. Ease-of-use is enhanced through an LCD panel that displays printer status.

The new systems give Olathe the capabilities to expand the scope of their badge system. Visitors are required to wear badges, but at present they are generic. "We may move into photographing the visitors as they walk in, and then issue the card," says Madden.

In addition, Madden says they anticipate networking the badge database with other school databases. The network protocol is based on Windows NT and is set up to work with any PC database.

George Partington is senior associate editor of Access Control & Security Systems Integration.
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Warning signs
When a school is burglarized during the night, it usually is easy to identify how the perpetrater gained access to the building and what can be done to reduce the probability that such an event can be repeated.

When an act of violence occurs, identifying the cause usually is a little harder. By recognizing the contributing elements in various acts of violence, school officials can pay more attention to them and increase their opportunities to intervene and prevent future incidents from occurring.

After a violent act has occurred, it is easy to identify strange behaviors exhibited by perpetrators during the period of time preceding the incident. Some of these behaviors, when considered alone, offer little clue as to what the intentions of the actor might be. However, when more than one activity takes place involving the same individuals, increased attention is warranted.

For example, if a student shows a change in behavior in class and appears withdrawn and disinterested, a teacher becoming aware of that should monitor the student and try to identify possible causes of the change. On the other hand, if that student also is discussing ways to commit murder, providing details about how weapons are used, and speaks of being angry at other students or teachers, the people aware of that activity should initiate a close examination of the student. Such a response should involve crisis counselors, law-enforcement officials and certainly the student’s parents or guardians. By doing this, a serious act of violence might be prevented.

There also are steps educators can take to make their schools safer in the long run. They require a change, or reinforcement of attitudes, and a total commitment toward safe schools. The following 10 steps are designed to accomplish that end:

1. Establish parameters for acceptable behavior. Be fair and consistent in responding to transgressions.

2. Demonstrate sincerity in your concerns for safe schools and the students you encounter.

3. Learn and teach conflict resolution. Relate the benefits of avoiding violence and encourage students to resolve differences through dialogue.

4. Reinforce the concept that schools are there to benefit students, and staff members are there to help them. Encourage students to report crimes and suspicious incidents.

5. When you become aware of possible threats or signs of dangerous behavior, take follow-up action immediately.

6. Do not condone bullying or harassment between students. Show students that such behavior is unacceptable by intervening and taking follow-up action.

7. Participate in activities outside your area of responsibility. You share in school ownership; make your opinions and recommendations known in a positive way.

8. Reach out for the parents or guardians of the children you interact with. Assume responsibility to learn what each student experiences when the school day ends. Make yourself accessible.

9. Have a plan to follow in the event you encounter a dangerous situation while you are in control of a group of students. Be familiar with the school’s crisis-response plan. If your school does not have one, recommend one be written.

10. Be a role model for positive behavior. Refrain from acting in ways you are trying to discourage. Give them a living example of what good behavior is.

The entire country is engaged in dialogue related to issues of school violence. We are all concerned about preserving our future by freeing our children from unwarranted dangers. School officials did not ask for these problems, and few of them are prepared to address them.

Just the same, the issues relating to school security are present in every school and a potential problem for every school employee. The sooner we accept that, the better prepared we will be to respond.

Martin J. Dunn Dunn is a career police officer with 26 years experience in a diversity of assignments. He has served as the Chief of Campus Police for the Lower Camden County Regional High School District, N.J., for the past five years. In addition, he has been active as a training and security consultant for dozens of schools and police agencies. He holds a Bachelor’s Degree in Criminal Justice, a Master’s Degree in Education and Administration, is a graduate of the F.B.I. Academy, and is an Adjunct Professor of Sociology.

Providing a safe physical environment

Effective and safe schools communicate a strong sense of security. Schools can enhance physical safety by:

Supervising access to buildings and grounds.

Reducing class size and school size.

Adjusting scheduling to minimize time in hallways or in potentially dangerous locations.

Conducting a building safety audit.

Arranging supervision at critical times.

Having adults visibly present throughout the school facility.

Staggering dismissal times and lunch periods.

Monitoring the surrounding school grounds.

Coordinating with local police to ensure there are safe routes to and from school.

School resource officers more than security guards

By CONNIE MULQUEEN

Curt Lavarello has never forgotten a day in his early career as a school resource officer (SRO) when a female student seeking a guidance counselor was told she could make an appointment the next day from 1 p.m. to 1:15 p.m.

“Basically, they were telling her that any problem she might be having would have to be dealt with in 15 minutes,” says Lavarello, executive director of the National Association of School Resource Officers, as well as an SRO for 15 years for the Palm Beach County School District in Palm Beach, Fla. “You wonder how much we do that as adults.”

Lavarello offered to help the girl as she left the office, and it turned out the girl’s father was abusing drugs and beating her mother. Lavarello was able to work with the local community policing program to address the problem as both a school issue because a student had a problem and a community issue because a crime was being committed.

The role that Lavarello played that day increasingly is being played out all over the country as more schools are deciding it’s not enough to have unarmed security guards. School resource officers go beyond the traditional security guard role of monitoring campus traffic and enforcing regulations.

They develop mentor relationships with students as a proactive measure to prevent crime and tragedies by identifying and solving problems before they erupt into violence.

Though school resource officers are not new — Flint, Mich., had the first one in 1953 — it’s only been in the last decade that mounting numbers of schools are using them, according to Lavarello and Joanne McDaniel, research director for the National Center for the Prevention of School Violence, Raleigh, N.C.


SROs are becoming an international trend as well, according to Lavarello, who claims that he knows of SROs in all 50 states, Canada, Australia and England.

Many schools choose to use both guards and police officers, as they serve different roles and can help each other, McDaniel says. Security guards free up SROs to spend more time counseling, teaching and mentoring students.

By working in the schools, SROs act as a liaison between the community where juvenile crimes occur and the schools, advising school officials about juvenile offenders and students about community resources, she says.

“Say a fight breaks out Saturday night at the rolling rink,” Lavarello says.

“An SRO can come to school on a Monday morning and inform the staff faculty that this problem might continue at school. The SRO calls in the students involved and counsels them, helps them come to a resolution. In a lot of the recent school tragedies, the shooters were talking about being called names by other students. A police officer is another set of well-trained ears in the school.”

SROs have three main functions. They serve as:

- armed police officers with arrest powers;
- counselors of law-related issues, helping to guide children to appropriate community services; and
- teachers of the law, either teaching their own classes or visiting classes to give talks and presentations.

Their main purpose is to develop a rapport with the students so that students trust them enough to either inform them about other classmates planning violent incidences or turn to SROs for help when they themselves are in trouble, McDaniel says.

On the other hand, security guards do not have personal relationships with students, McDaniel says. Guards are responsible for security on campus but not for working with students. They monitor traffic flow inside and outside of schools. They work in the parking lots, monitor hallways and control crowds at events, and in 90 percent of schools who use them, they are unarmed, McDaniel says.

Both Lavarello and McDaniel say that schools trying to make a decision about security measures first need to determine their problems and study ways to address those problems.

“If a school sees a need for someone with law enforcement powers and authority, then the SRO becomes an option,” McDaniel says.

“Guards play an important role because they are on the campus all the time; the SRO may not be,” Lavarello says.

Lavarello was able to prevent a possible shooting spree a few years ago when students informed him about an angry student with a gun who was upset at another student for picking on him. Lavarello immediately went looking for the student and found that he was not in his scheduled class.

“I found him walking out of the gym,” Lavarello recalls. “As he approached me, I could see the gun in his waistband. He looked mad and like he was intent on doing something. Because he knew me and trusted me, he did not try to run when I approached him. He was calm and listened to me. I asked him how he was doing. When I got close enough, I was able to subdue him and confiscate the weapon.”

Connie Mulqueen is an Atlanta-based writer.
Conducting a school facility security audit

It’s the first step in solving the equation of people, procedures and hardware.

By JONATHAN L. HALE

School districts across the country are taking steps to improve the security of students, faculty and staff. Recommendations include increased police or staff presence, mentoring programs, counseling and other tasks — or personnel-centered activities. All of these approaches are worthwhile, but let’s not forget the basic and mundane activity of performing a security audit of the physical facility.

Security audits are often considered to include a review strictly of the physical structures and grounds to ensure they are conducive to good security and safety of the students and staff. This limited view overlooks other needed components for an effective security system.

Any system consists of three basic components: people, procedures and hardware. The people in this equation include administration officials, teachers, security management and staff, maintenance staff and even students and visitors.

Procedures — which people must follow in order for the system to function correctly — generally reflect the specific environment and requirements of the school. Some schools may operate in a closed-campus environment, with fencing and controlled access. In some cases the environment has resulted in the installation of walk-through metal detectors, while in other cases the environment does not warrant installation of this equipment.

Finally, the hardware component includes any mechanical or electronic devices, including the physical structure, used to support the first two elements of the system. The security of a school must reflect an integrated combination of these three elements. School security audits should, therefore, include an examination of the people and procedures responsible for security as well as the electronic and mechanical hardware used.

Administration

School districts frequently consider security as a series of tasks, each assigned to individuals who are primarily responsible for other duties. For example, the key control program might be coordinated by one person, the security staff by another. Maintenance personnel might have responsibility for some aspects of security and are supervised by yet another manager. While it is not strictly necessary for all of the tasks associated with securing a facility to be organizationally below a single individual, one person should be directly responsible for security issues. It may require liaison with other departments, but one person should have full knowledge of all security elements.

Operation

Like other institutions, schools are difficult to secure physically. Many schools are used for a variety of activities besides educating our youth. They are used for local community group meetings, night school, plays and related practices, as well as after-school student activities. The result is a facility that is frequently open between 7 a.m. and 10 p.m.

The first step, then, in auditing a school is to map out how the school is used; that is, what hours of the day/week are accessible to which groups. Basic security principles involve reducing the access points of a facility to make it easier to screen entrants. Often, schools leave several entrances unlocked during the day. Reducing the number of entrances reduces the cost of screening people through these several portals, while imposing a cost of inconvenience on those wishing to enter.

Students generally have access to all areas of the facility during daytime hours. Reducing access after hours can generally improve the overall level of security within the facility. By determining which groups need access to specific areas of the facility after hours, steps can be taken to limit travel within the school to only those areas which must be accessed. Corridor gates and other means are often used. Keep in mind the exiting requirements of the Life Safety Code when installing these devices.

Visible ID badge program

Entrant screening is made easier by the use of a visible ID badge program for
students and staff. It is also important throughout the day to be able to identify those people who are authorized to be in the school from those who are not. The most popular approach today is the use of a digital video badge creation system which prints color ID badges on PVC cards. But to be effective, badges should be issued with neck straps and students required to display them at all times when on campus.

Visitor sign-in and pass procedure

Visitors should also be issued visible badges. All visitors should be recorded on a log that identifies who they are; the company they represent, if any; who they are visiting; time in and out; and any information on their vehicle such as type and license plate number. Visitor badges are generally disposable; they typically are adhesive-backed paper labels. Some means should be employed to ensure the badge cannot be used after the date it is issued. Printing the current date in very large readable letters is one approach. A better solution is to use self-expiring badges, which consist either of a clear plastic sticker applied over the badge, that turns a color in time, identifying it as expired; or, for others, the badge itself displays an expired sign after several hours.

Perimeter doors

The major line of defense for a school facility are the entrances. It may sound obvious, but perimeter doors to a facility should be tested to ensure that they close and lock securely without requiring manual effort. For some schools, the doors take a beating. Students may treat the doors and exit hardware carelessly or even seek to disable them. In one school recently surveyed, the students in the shop department used their tools to lock the crash bars down, unlocking the doors nearest their department — it was a more convenient entrance than the entrance at which screening was taking place.

One group, whether that be security, maintenance or some other group, should be responsible for checking the operation of doors and door hardware and reporting any doors requiring repair. Procedures should be in place for documenting these findings and damaged doors; frames or hardware should be repaired promptly.

Many schools are concerned about keeping students in the school during the day. Students wishing to ditch school may bolt through exits between classes. As a result, some schools have gone so far as to chain and padlock exit doors, a clear violation of the Life Safety Codes. Several solutions have been used, but all but one fail to fully meet the requirements of the Life Safety Code. Some schools have used magnetic locks on exit doors, which are linked to the fire alarm system and release automatically in case of fire. Some local authorities, used to the chain and padlock approach, are happy to approve the solution, although it does not conform to the code requirements. The only approved solution is the use of delayed-exit devices — magnetic locks with special circuitry approved for use under the Life Safety provisions.

Still other technology can be used to prevent unwanted exits during the day. A closed-circuit video system can monitor the problem exits, recording activity through the door. Students can then be identified and counseled.

Intrusion Alarm Systems

The nationwide initiative to computerize our schools has placed high-value computer equipment in most schools, even at the elementary and middle school levels. Most computers used are standard PCs and scanners, printers and other standard peripheral equipment. This equipment generally has a high street value.

Other areas of schools also contain information or equipment that administrators may feel is valuable and should be secured. Certainly the business office, audio/visual equipment storage and other areas containing high-value equipment or information are typically protected. The typical approach to securing these areas is to hire a local security vendor to install an intrusion alarm system. Unfortunately, these systems are installed as a specific need is identified. The result is a whole series of independent intrusion alarm systems protecting various areas of a school. These systems may, or may not, report to off-site central monitoring stations. In many cases, more than one account is established with the central station, with each account monitoring an individual alarm panel protecting one office within a school.

With no standardization in alarm panels, teachers must learn the idiosyncrasies of each panel. There is generally no printed report sent to the school on a regular basis, so no one on staff has any idea of alarm activity or arm/disarm activity at any of the protected areas. An added drawback is that the school is paying for multiple accounts, when a single account would suffice.

Alarm systems should include sensors to fully protect the area. If the area has windows, care should be taken to insure that entry through all portions of the windows will be detected. Motion sensors are often placed to provide general coverage in a room with windows. When tested, it is often possible to enter the room in specific areas without being detected.

A better approach would be to have all separate alarm panels report to a single system and have that system report alarms to a central station. A printer connected to this system can provide an up-to-date printout of alarm activity without requiring a call to the central station or waiting for the monthly report to arrive.

Perimeter doors should also be monitored by magnetic door position switches. Similar alarm contacts should also monitor swimming pool areas to offer protection from liability of unauthorized use. Auditoriums, libraries and other areas subject to vandalism may also be considered for alarm monitoring. Alarm monitoring for all of these areas, including perimeter entry doors, can be increased by adding motion sensors to complement the door position switches.

Key control programs

Key control programs are one of the most difficult areas of a school to administer. Most schools employ replaceable core locksets, with a master/sub-master system. The problem is
that after a few years of giving keys to teachers for their rooms and perhaps the entry doors, there is no clear record of who has keys. With turnover, there can be no assurance that currently unauthorized persons may have keys to the school.

**Access control systems**
Electronic access control systems have gained popularity in schools. Photo ID cards can be used as an access control token. Typical controlled locations are the school perimeter entries and selected high security offices within the school.

**Closed-circuit television**
Use of closed circuit television (CCTV) within schools is increasing. Typical uses of CCTV are to protect against vandalism and unauthorized intrusion. The most effective use of CCTV is to assess a situation rather than to identify one. In order to make the most use of the technology, CCTV requires an alarm trigger, such as the alarm caused by someone opening a door or passing through a motion sensor's area. This event brings the operator's attention to the screen. An alternative approach is to record CCTV images and play back the tape in order to review an event.

**Grounds protection**
Depending upon the specific needs of the school, certain areas of the campus or the entire campus may require fencing. Athletic fields are often fenced to protect them from vandalism and provide an ability to control entry to sporting events. If the school environment requires it, is the fence in good repair and does it provide a secure barrier around the entire area?

**Special events security**
Special events, such as athletic events, plays, etc., generally require additional security in order to prevent people attending the event from freely touring the entire school. Temporary gates, locked doors or security personnel can be used to limit access to the rest of the school. Care should be taken to provide any required exiting in the event of a fire.

**Campus lighting**
Campus lighting is an important consideration, as is an evaluation of shrubbery and other elements which adjoin pathways, stadiums and parking lots. Walkways and parking lots should be well lit, with light levels a minimum of 2-5 foot-candles. Entrances should provide a minimum of 10 foot-candles. Shrubbery should be trimmed so as to not provide individuals a hiding place.

Jonathan Hale, CPP, is a senior security specialist with Gage-Babcock & Associates, Inc. — a security and fire protection engineering and consulting firm.
Technology offers a number of tools that can help construct a school security system. But which tools are the most important to school security and how do you evaluate them?

By MICHAEL FICKES

In the wake of violence at high schools in Colorado and Georgia, school officials across the country are allocating funds for security technology, hoping to prevent future tragedies.

But what kinds of security products make the most sense for schools? How do those products fit into a school security system? What criteria should administrators use in evaluating security products?

School administrators often consider use of security products such as emergency communications devices, badging systems, access control and alarm systems, closed-circuit television (CCTV) systems, and metal detection and x-ray screening systems.

Important criteria in evaluating security technologies include thoughts of how a security product fits into the continuum of prevention, deterrence,
intercoms. Likewise, intercom speakers set in the wall near the ceiling cannot be easily damaged.

Intercom systems available today come with two wall buttons. One operates the intercom system in the conventional way, keeping the front office. A second button for emergencies, however, can provide one-touch emergency dialing over the phone lines. The system can be set up to dial a series of telephone numbers until a connection is made. The process may start with a call to the front office. If that connection fails, another call will go out to the security office and then another to the police.

An additional security feature available with today's intercom systems prevents canceling calls from the classroom. Only the individual receiving the emergency call can break the connection.

Since most schools already use intercom systems to manage bells, paging, music distribution, and routine intercom communications, it makes sense to consider a system equipped with emergency communication capabilities when it comes time to upgrade or replace an existing system.

At the same time, consultants suggest considering intercom calling stations at strategic locations in the corridors and main entrances. For such a configuration, another option offered by some systems allows a connection from the intercom call button to a CCTV camera. When a caller hits the call button, a camera will swing into position, while an alarm monitor in the CCTV monitoring station beeps a security officer and displays video of the emergency calling station.

Finally, emergency intercom systems fit a standard security system profile by providing an alarm mechanism. Depending on features and installation requirements, an emergency intercom system may cost between $200 and $300 per station.

Badging systems
Experts uniformly recommend that school administrators consider badging systems for students, faculty and staff.

Badging systems provide an acceptable way to draw everyone into a school's security efforts. Setting a policy that requires everyone to display a badge with his or her name on it will cause complaints. However, once the school population has grown accustomed to the idea, students, faculty and administrators alike will notice anyone not wearing a badge. More importantly, they will begin to report unfamiliar, unbadged people to the administrative or security office. In this regard, a badging system can serve as an alarm system.

Consultants recommend a color-coded system that uses one color for student badges, another color for faculty badges, a third color for administrators and a fourth for visitors. By changing the color of the visitor passes daily, it becomes possible to identify and question a visitor using an old pass.

Depending upon how sophisticated a school's current ID program is, upgrading that program to a general badging system may prove relatively painless.

Eventually, administrators may want to look at photo identification badging technology — plastic cards imprinted with an individual's name and photograph. As a security measure, photo ID badges work better because the photograph makes it impossible to transfer a card.

In addition, such a system opens up other uses for the cards. Printing a bar code on the card might allow its use as a library card. Adding a magnetic stripe might make it possible to access a student account for meals in the cafeteria or sporting events. The magnetic stripe option will make it possible to use photo ID cards to operate access control card readers installed at certain doors throughout the school. Those investigating access control equipment may want to consider proximity card technology as well. Proximity card readers unlock doors when a card is held up to the reader. Card swiping is not required.

A badging system using bar codes, magnetic stripes, proximity technology
or even more advanced card technology requires a camera, a computer, software capable of managing a large digital image database, and a card reader. Consultants recommend video cameras with digital image capturing devices for these systems. A lower cost option is a digital camera. Depending on which is chosen, the cost of the camera and accessories may range from $600 to $1,200. Standard computers can manage badging stations and cost about $1,000. Software may add another couple hundred dollars to the cost.

Card costs depend upon the type of card used. Bar code cards may cost less than $1, magnetic stripe cards generally cost around $1, and proximity cards cost $2.50 or more.

The printer is the most expensive component in a badging system. Card printers come in low-end, mid-range, and high-end models with prices running from about $2,500 at the low end to $5,000 at the high end.

There are two differences between low-end, mid-range, and high-end printers. First, higher-priced models can handle greater volumes of printing. Second, higher priced models will print more kinds of card media: from proximity cards down to magnetic stripe cards to bar codes. A low-end printer might satisfy low-volume needs for bar code cards and magnetic stripe cards, but cannot handle proximity cards. Consultants suggest that schools considering unique card features start with a mid-range printer.

Access control and intrusion detection systems

Managing access control begins with decisions about when to lock and unlock which gates and doors in a facility.

In one school, administrators may want to allow in-and-out use of all doors at the beginning and end of the school day, while locking all but the main entries while school is in session.

In another school, administrators may require everyone entering the school in the morning to pass through a main door equipped with a metal detector, which means that all other doors into the building must be locked.

For schools where many doors and gates are locked and unlocked repeatedly during the day, consultants recommend access control systems complete with card readers and system management software. Card readers allow authorized people, including students when appropriate, to move freely through doors that generally remain locked. Programming features allow cards to be added and subtracted from the system with ease. Access control software makes it easy to lock and unlock doors on a schedule programmed into the system, while maintaining a record of whose cards accessed which doors at what time.

Access control technology also eases the problem of lost keys. If a card is lost, the system manager can deactivate it upon receiving a report of the loss. And no accompanying expense to change the locks arises.

Access control technology can extend control over any and all rooms inside a school. Computer classrooms can be programmed to lock automatically when not in use, while a card reader can provide access to students, teachers and administrators who have made previous arrangements to use the room.

Other rooms that may require locking out general traffic include certain administrative offices, the auditorium and the science labs.

Similarly, the facility’s heating, ventilating and air-conditioning equipment rooms can remain locked to everyone except maintenance people.

Intrusion control alarms work side-by-side with access control. Controlled doors can be equipped with simple electrical contacts, which connect to terminals on control panels governing the access control system. Someone uses an authorized card to open a door, no alarm sounds. But when someone tries to gain access with an unauthorized card or forces a door, the system will set off an alarm at the computer controlling the system. Intrusion alarms can also be connected to cameras in a closed circuit television system either directly or through the access control system.

When pricing an access control system, consultants urge life-cycle comparisons of different systems.

For example, a magnetic-stripe card system may cost $75 per reader and $1 per card. For a system with 20 readers and 1,000 cards, the cost of these components would come to $2,500.

On the other hand, a proximity card system may cost $300 per reader and $4 per card. The total cost of these components might rise to $10,000.

While magnetic stripe systems carry significantly lower component costs than proximity card systems, the analysis changes with the addition of annual maintenance charges. Proximity card readers rarely, if ever, need maintenance. But magnetic stripe card readers require service twice a year at about $100 per service call. That’s $200 for each of 20 readers each year or $4,000 per year in maintenance costs.

Within two or three years, the differential between magnetic stripe and proximity technology disappears.

On the other hand, administrators should not assume that the costs cited above represent the cost for an installed access control system. Installation and cabling can turn out to be the most costly elements of an access control system, and there is no way to estimate those costs without visiting a site and making judgments about cable runs that will be made inside the walls. Even the most detailed estimate can turn out to be wrong if the installer runs into difficulty pulling cables through the walls.

Closed-circuit television systems

CCTV systems serve three security purposes. First, cameras mounted in full public view let people know that someone may be watching. This provides a deterrent. Second, cameras gather information on an event in progress. Security officers know what is happen-
ing at a monitored site and can prepare to respond appropriately to a particular problem before their arrival. Third, a CCTV system records information about what happened for use by police or prosecutors after an event ends.

CCTV systems include a number of components. Strategically placed video cameras take the pictures. Cabling delivers video signals to a designated monitoring area. At the monitoring station, devices called switchers accept the video signals and send those signals to video monitors. Switchers also accept signals from access control systems and door contact alarm systems.

Most CCTV systems use several monitors. A couple of monitors display switched video according to the way the switcher is programmed to tour through the cameras. One monitor is always reserved for alarms. When an access control or intrusion alarm is activated, the switcher immediately sends video from a designated camera near the alarm site.

Video cassette recorders (VCRs) connected to the system record incoming video from each camera. Here’s where CCTV can appear to grow complicated.

Years ago, devices called sequential switchers moved video signals from cameras into VCRs and monitors. Sequential switchers “dwelled” on a particular camera for a preset time, say four seconds. The VCR would record four seconds of video from each camera, while the monitors would display those four seconds. An eight-camera system would display and record two four-second dwell-times of video from each camera per minute. Sequential switcher systems continue on the market today.

Newer systems can record what is called “near real-time video,” with the addition of another device called a multiplexer.

System designers define multiplexers as devices that manage video signals. Full-featured multiplexers can manage video signals from up to 16 cameras. Multiplexers do this by sending the VCR a little bit of video from each camera every second. A user can then tell the multiplexer to replay video from camera one. The result is a near real-time record.

Multiplexers can also route video signals into monitors and enable individuals monitoring the system to watch video from any individual camera in the system or to flip from camera to camera in a preset cycle.

Thanks to multiplexing, a 16-camera system may not need a switcher. For systems with more than 16 cameras, consultants recommend an advanced technology matrix switcher. These devices accept video from cameras and route it through two or more multiplexers connected to VCRs and monitors.

Matrix switchers integrate the cameras connected to large systems. They also add camera management features, such as remote control of cameras equipped with pan-tilt-zoom capabilities and motion detection signal processing, in which a camera can be set to give an alarm when something in a particular part of the frame moves.

Metal detection and X-ray screening

About six years ago, school administrators from urban districts began to purchase metal detection devices in an effort to keep guns, knives and other metal weapons out of schools.

Metal detectors come in walk-through and hand-held designs. Both are used in entry screening. When a walk-through detector alarm sounds, a security officer with a hand-held detector scans the individual with the handheld device.

Some school security people prefer random searches to entry screening, in the belief that its important to know who is carrying weapons and to prosecute them. With entry screening, those carrying weapons will often dispose of them before passing through the screen-
Crisis management: Every school needs a plan

By MIKE KENNEDY

If the deaths in Jonesboro, Ark., West Paducah, Ky., or Springfield, Ore., didn’t sway school officials, the tragic massacre at Columbine High School in Jefferson County, Colo., should convince doubters that “It couldn’t happen here” is not an acceptable crisis-management plan.

Yet many schools would be caught flat-footed in the face of a tragedy because they don’t have a plan in place.

“So many schools don’t get around to crisis planning,” says Scott Poland, director of the psychological services department for the 58,000-student Cypress-Fairbanks Independent School District, Houston. “Every school has a skeleton in the closet, a tragedy that they wished they could have avoided. Schools should have heard the wake-up call a long time ago.”

Poland has been sounding the alarm for years. As chair of the National Association of School Psychologists National Emergency Assistance Team and team leader for the National Organization for Victim Assistance, he has traveled to Jefferson County, Jonesboro, Springfield and West Paducah to offer counseling services after student slayings there.

Prevention is key

Crisis intervention has three levels, says Poland:

- **Primary**: steps taken to prevent a crisis from happening.
- **Secondary**: steps taken to minimize effects in the immediate aftermath of a crisis.
- **Tertiary**: steps taken to provide long-term services to those most affected by a crisis.

Schools need to devote more attention to the first level, says Poland. “Schools are not doing prevention,” says Poland. “They don’t have those programs. They don’t have the time.”

In today’s climate, learning about violence prevention, suicide prevention, anger management, diversity acceptance, car and bike safety, and problem solving may be just as vital to students as learning about reading and writing.

“And schools should have programs after school — something safe, productive and supervised for children to do,” says Poland.

An effective crisis plan also embraces key members of the community outside the school district, says Cathy Kennedy Paine, special services coordinator and a leader on the crisis-response team in the Springfield, Ore., district.

School officials should get to know key members of the police and fire departments, rescue and hospital personnel, and mental-health professionals.

Springfield had already developed those relationships when the tragic shootings occurred last year at Thurston High School.

“Those connections were very important,” says Paine. Crisis team members should be trained to deal with issues such as trauma response, children’s grief responses and student-support techniques, says Paine.

### Crisis planning resources

A sample of Web sites related to school crisis management.

- The Jefferson County, Colo., Schools Crisis Response Plan: [http://204.98.122.41/eval/ap.html](http://204.98.122.41/eval/ap.html)
- What To Do…Responding to Crisis (National Resource Center for Safe Schools, Northwest Regional Educational Laboratory): [http://nwrel.org/safe/crisisrespond.html](http://nwrel.org/safe/crisisrespond.html)
Steps toward crisis management

Scott Poland, director of the psychological services department, Cypress-Fairbanks Independent School District, Houston, recommends the following guidelines for crisis-management planning:

- Establish procedures for notifying staff of emergencies. Some schools use code words broadcast over intercoms to alert staff to take pre-arranged actions.

- Designate leadership within each building. The leaders should have a map of the school site and know where power and water shut-off points are.

- Have an in-service meeting at the beginning of the school year in which officials discuss procedures with police, fire and other emergency personnel.

- Designate a place where parents and others can get information about the crisis and about students. The location should be away from the crisis site so that it does not interfere with emergency procedures.

- Have staff members trained in basic first aid, and make sure team leaders know who is trained.

- Make a list of people (counselors, psychologists, mental-health agencies) who can help during and after a crisis.

- Have a way to communicate. Often normal avenues of communication become useless in a crisis. Consider two-way radios and cell phones.

- Designate who will communicate with the media and how information will be provided. Make sure correct information is coming from the school system, and control the media's access to school sites.

- A plan should allow a school leader to locate all staff and students. The day's attendance records could be needed when trying to locate students.

- Be flexible. Prepare for everything you can think of, but some decisions will be made according to circumstances as they develop.

Be prepared

A crisis plan should include designated team members, each of whom have clearly defined roles for dealing with the situation. When word of a crisis spreads, three waves of people descend on a school: police and medical personnel, media and parents. Poland says a plan should clearly spell out who on the crisis team should be responsible for communicating with each of those.

Each school should have a "crisis box" that an administrator can take when a crisis erupts, says Poland. It should include items such as emergency cards, flashlights, paper and pens, cell phones, bullhorns and distinctive clothes for team members such as vests or hats.

All school personnel should know exactly where they are supposed to send students if an evacuation is necessary. Paine says that during the Thurston crisis it was especially important to rein in the media to maintain control of the school campus.

Lingering effects

Poland also says that many schools underestimate how long the traumatic effects of a tragedy can linger among some students and staff members.

"Schools want to get back to what they do best, which is teaching reading, writing and arithmetic," says Poland. "They don't recognize the long-term impact of what has happened."

Officials at the Springfield School District took that into account as they planned how to handle May 21, 1999 — the one-year anniversary of the shootings at Thurston High School.

"We try to let people heal at their own rate," says Paine. "The further away you get from the tragedy, the wider the spectrum of emotion you will find. Some people have gotten over it, and some are still struggling with their recovery."

Paine says certain milestones — holidays, graduation, court trials, anniversaries — can cause painful feelings to resurface among people still affected by last year's shooting. To maintain a climate of normalcy, Thurston held a regular schedule of classes on May 21. But the school did not penalize any students who chose to stay home that day, and about 70 percent of the 1,450 students did not come to school.

On the evening of the 21st, the district, together with the city of Springfield and the city's Ministerial Association, held a community gathering and memorial service in the Thurston High gymnasium.

Keep it fresh

To be effective, a crisis plan has to be more than a document gathering dust on a shelf in the administrator's office. Once a school has a crisis plan, administrators need to make sure staff members are familiar with it and understand what to do if a crisis occurs. An effective way to keep school communities aware of crisis plans — and to root out potential pitfalls in a plan — is to periodically have a crisis drill. The school should inform parents and local agencies that a drill is taking place, and it should be careful not to unnecessarily alarm students or staff. Administrators also need to continually review and update the plan to keep up with changing circumstances.
When a high school student found a note scribbled with a bomb threat, Buddy Coleman was relieved he had demanded a bomb-threat evacuation plan two years earlier.

The deputy superintendent of Randolph County Schools, Asheboro, N.C., had been prompted to organize the plan just after the 1997 Paducah, Ky., high school shootings in which 14-year-old Michael Carneal killed three fellow students as they prayed in the school chapel.

"We thought about this, and said this can happen anywhere, and we're going to be ready for it," he says.

Of course, Coleman hoped he would never have to use the plan, but he never imagined that he would have to use it three times in one week, two of those times to evacuate 17,000 students from 24 schools in 90 minutes.

On a Monday morning less than a month after the Littleton, Colo., massacre, the first bomb threat in Randolph County was found behind the mirror of a boy's restroom at Southwestern Randolph High School.

The note, faxed to Coleman at 8:25 a.m., threatened bombs were planted at four specific schools that would make Littleton "look like small potatoes." The note said the bombs would go off at 10 a.m. and alluded that other schools were involved.

"As far as we were concerned, this meant all the schools were involved," says Coleman, responsible for safety and security for the school district. "I immediately informed the superintendent. We called the sheriff's office and in just a few minutes, we decided that based on the contents of the note and the time frame, we had no choice but to evacuate every single school."

The first step of the bomb-threat plan, which had already been practiced in evacuation drills, was to secure school grounds before letting students out. Teachers, coaches and school officials performed this task in 15 minutes. Then each teacher led his or her classroom outside.

Meanwhile, school officials called four TV and seven radio stations that broadcast in the mostly white, middle-class farming community.

Although the bomb threat turned out to be a hoax, an investigation was launched immediately. A $1,000 reward was boosted to $3,000 from donations by business owners negatively impacted by the school closings.

By Wednesday, police arrested the 16-year-old boy who had found the note after his friends turned him in for the reward. He is expected to be prosecuted as an adult and faces up to 40 months in prison.

A third note was found on Friday in the girls' restroom of Southwestern Randolph Middle School, which targeted the middle school and Southwestern Randolph High School. Coleman closed only those two schools.

Bomb threats such as the ones in the Randolph County School District have increased substantially since the Littleton, Colo., tragedy, says Tim Hill, a
spokesman for the Bureau of Alcohol, Tobacco and Firearms (ATF) in Washington, D.C.

But though Littleton focused the nation’s attention on attempted and successful bombings by juveniles, this problem is not new to the ATF, according to Special Agent Mark James, deputy chief of the Intelligence Division, in a statement May 20 before the U.S. Senate Commission on Science, Commerce, and Transportation. His statement was about the use of the Internet by youths to obtain and purchase bomb-making instructions and materials.

"Of 13,510 bombings or attempted bombings reported to the ATF from 1993 to 1997, 4,619 — 34 percent — were attributed to juveniles," James told the commission.

The statistical percentages of juvenile bombings vary widely geographically, he said. For example, during this same period, the State of Arizona reported 617 bombings or attempted bombing incidents, of which 66 percent were attributed to juveniles. At the same time, South Carolina reported 44 bombings or attempted bombing incidents, of which 38 percent were committed by juveniles.

"Whatever the numbers, it can be safely concluded that use of explosives by juvenile offenders has reached a level of significance," James said.

The media attention to Littleton has resulted in copycat crimes, says Hill. "Littleton has made us aware of the extent of what can happen. It wasn’t just one bomb; it was 60 bombs."

The ATF advises schools to be proactive by anticipating possible problems in their districts, develop a plan and then know how to implement the plan, Hill says.

Pre-planning is a key to dealing with these situations because one never knows when a threat is real. "We need to make sure people know how to respond appropriately without having to close the schools every time."

When schools were in session that ominous week in Randolph County, attendance dropped to 50 percent.

Coleman estimates the cost to the school system for the shut-downs was $100,000 a day, which includes teacher’s pay and food that was not used. Most of the businesses in the area had to close because many of the workers were parents. Businesses with two shifts reported not being able to stay open for both shifts during the week.

The school district has received other bomb threats since then, but schools have remained open because teachers and school officials report to work a half-hour early each morning to search school grounds for notes or evidence of bombs. More than 150 parents patrol school hallways and watch restrooms, only allowing one student in at a time. Restrooms are checked after each student leaves.

Authorities believe that friends of the 16-year-old who wrote the first note are responsible for the subsequent notes, but they don’t have enough evidence to make an arrest, Coleman says.

Like Eric Harris and Dylan Klebold, the shooters at Littleton, the youth charged with writing the first note in Randolph County and his friends are not the kind of students people would suspect, Coleman says.

"They were average students who did not stand out in any way. They were not troublemakers; they also were not popular or involved in after-school activities. He was not a disruptive student, nor was he an outstanding student," Coleman says. "His crowd was a nondescript crowd. There is not really a whole lot to say about him; he was not well known and has offered no explanation as to why he did this. But he fits the profile of kids who do these types of things. He was on the fringe; he didn’t stand out."

Although any student may make bomb threats or plant suspicious devices, educators should try not to succumb to stereotypes when trying to identify potential teen bombers, according to Ken Trump, president and CEO of Cleveland-based National School Safety and Security Services, which provides training and consulting on school security for school districts and law enforcement officers.

"It is not unusual to find students involved in such activities to have clean discipline and criminal records, above-average grades and be exceptionally intelligent in science and literate with computers," Trump says. "Unlike other cases, the student who is a chronic discipline problem may not be the prime suspect when investigating bomb offenses."

Trump also advises officials not to assume that potential problems with bombs could only happen at the secondary level. Reports of bombs and bomb-threats have also occurred at the elementary level and in school buses, he says.

Web plays big role in homemade bombs

The use of computer bulletin boards to obtain bomb-making instructions first came to ATF’s attention in 1985, when five separate bombing incidents were attributed to knowledge gained from the Internet, according to James in his statement to the Senate Commission.

From 1985 to 1995, 35 bombing incidents occurred as a result of information obtained from Web sites, and in 1996, that number increased by 600 percent to 200, James reported.

More than 180,000 Web sites provide information on explosives ranging from pipe bombs to nuclear devices, says Trump. And one site contains more than 130 links to explosive formulas and disruptive techniques, he says.

To make matters worse, ingredients for homemade bombs are easily accessible. They include household items such as aluminum foil, ammonia, baking soda, cane sugar, Epsom salts and vinegar, Trump says. "Add a bottle, pipe or other readily available items, and it is easy to see how students now have new tools for creating havoc," he says.

Researchers at the ATF found 3 million Web sites containing information on pipe bombs, according to James. The top ten matches, he said in his statement, included articles describing in great detail how to construct a variety of pipe bombs using readily available materials. One such site, which claimed to represent a militia group, targeted juveniles, as it highlighted how model rocket engines and fireworks sparklers could be substituted for explosives and fuses.

James stressed that educational initiatives
targeting youth and new proactive investigative techniques focused on emerging 21st century technology should be identified, funded and implemented.

To help prevent more bomb incidents, the ATF is developing partnerships with Internet service providers to hyperlink sites containing explosives information to an ATF youth violence prevention Web site with prevention messages to juveniles, parents and educators.

"None of the Web sites on bomb-making have any cautions or safety information on them for kids who visit their sites," Hill says. "Kids think they'll experiment, and that's how a lot of incidents happen with kids making bombs that go off prematurely."

Prevention plan key to avoiding incident

While bomb threats plague many middle- to upper-class communities, the school system in Macon, Ga., where juvenile shootings are almost a regular occurrence in its mostly high-risk neighborhoods, has a handle on bombs.

The reason, according to the chief of the Bibb County Board of Education Police Department in charge of monitoring criminal activity at the schools, is due to a thorough bomb prevention plan that includes tough, consistently enforced penalties.

"I think the reason we haven't had as many problems as private schools and other public schools is because we've always treated our bomb threats seriously, more than other school systems, and long before bombs received national attention," says Michael Dorn, whose department is recognized by the U.S. Justice Department for having one of the best weapons prevention programs in the country. Indeed, the department has reduced violations in the last decade by 90 percent.

Long before most schools gave serious thought to bombs, Dorn had a plan in place that included bomb drills and random searches of students on buses, in classrooms, in lockers and on school grounds. Students found guilty of bomb threats or of making bombs with the intention of using them to blow up schools are suspended and arrested. Their names and crime descriptions are

Instructions for a two-person search

Excerpts from the ATF's Bomb Threats and Physical Security Planning Guide

When the two-person search team enters the room to be searched, they should first move to various parts of the room and stand quietly with their eyes closed and listen for a clockwork device. Frequently, a clockwork mechanism can be detected quickly without the use of special equipment. Even if no clockwork mechanism is detected, the team is now aware of the background noise level within the room itself.

Divide the room into two virtually equal parts, based on the number and type of objects in the room to be searched and not on the size of the room.

First Sweep

Look at the furniture or objects in the room and determine the average height of the majority of items resting on the floor. In an average room, this height usually includes table or desk tops and chair backs. The first searching height usually covers the items in the room up to hip height. Each person conducts a wall sweep of his or her side of the room, which includes items mounted on or in the walls, air conditioning ducts, baseboard heaters and built-in wall cupboards. Then each person goes back and checks all objects on the floor that come to hip level. The first searching sweep usually consumes the most time and effort.

Second Sweep

The following steps should be taken during each sweep of a room:

■ Divide the area and select a search height.
■ Start from the bottom and work up.
■ Start back-to-back and work toward each other.
■ Go around the walls and proceed toward the center of the room, usually from the hip to the top of the head. The two people return to the starting point and repeat the search at the second selected searching height. This sweep usually covers pictures hanging on the walls, built-in bookcases and tall table lamps.

Third Sweep

Determine the next searching height, usually from the top of the head to the ceiling. This sweep usually covers high-mounted air-conditioning ducts and hanging light fixtures.

Fourth Sweep

If the room has a false or suspended ceiling, the fourth sweep involves investigation of this area. Check flush- or ceiling-mounted light fixtures, air-conditioning or ventilation ducts, sound or speaker systems, electrical wiring, and structural frame members. Have a sign or marker indicating "Search Completed" conspicuously posted in the area. Place a piece of colored Scotch tape across the door and door jamb about 2 feet above floor level if the use of signs is not practical.
announced over the public address system in schools.

Since Littleton, Dorn has increased random searches and purchased more walk-through metal detectors, more effective at detecting bombs than weapons, which is why Dorn previously did not use them regularly. But now he uses them to search every student entering secondary schools each day.

Dorn has studied bomb-prevention techniques in Israel — the best worldwide at preventing attempted bombings — while participating in an exchange program to share information.

One technique he learned is developing a series of questions to ask student drivers as they enter school parking lots. The point of asking routine questions — such as "Is there a bomb in the car?" — is to study their reactions, he says. "We're looking for signs of extreme nervousness. The average student would look at us like we were stupid and say no, of course not, but someone who really had a bomb in the car would act totally different, maybe more nervous and not showing any signs of being surprised at our questions."

Another method is to watch students as they enter school each day for particular signs, he says. People walking around with bombs give off cues that the average person wouldn't recognize unless they were trained, Dorn says. "The Israelis are really good at this. They have stopped people entering buildings on suicide missions where you couldn't tell there was anything on them."

Dorn, who has been trying for years to get funding for bomb-sniffing dogs and to warn the public about the threat posed by the multitude of Web sites on bomb making, is now poised to do the same about anthrax, a lethal gas manufactured as a biological weapon of mass destruction. We could be looking at the same about anthrax, a lethal gas manufactured as a biological weapon of mass destruction. We could be looking at casualty rates that are much higher, he says.

As a result of national attention paid to violence in schools, Coleman convinced the Randolph County Board of Education five years ago to fund security systems as well as form a bomb-threat evacuation plan, he says. Coleman also has increased the number of meetings with principals to go over procedures for emergency situations.

Coleman plans to expand the school system's video surveillance program by adding cameras in elementary schools and expanding systems at secondary schools. They each have about eight Magnavox cameras in high-risk areas for crime, two Magnavox quad monitors and two Magnavox or Sony VCRs.

"Having previously worked in the Charlotte, N.C., school system where juvenile crime is more common," Coleman says, "I came to Randolph County with the knowledge of what can happen if you don't take control of a school. It's better to be proactive than reactive."

As for bomb incidents, sheriff's offices around the country do anticipate an increase over the next few years, according to Dorn.

He says: "The tragedy at Columbine High School was indeed small potatoes, compared to what might have occurred if the two shooters had made better triggering devices for the bombs."

"Had they not had a deputy sheriff at that school, it could have been much worse. The deputy sheriff was in the cafeteria when they entered. He prevented them from entering an entire wing of the high school where they could have killed a lot more people. There's a pattern now, where the mastermind behind each incident tries to outdo the last."

**Developing a plan**

Bomb threats and suspicious devices should be a top issue for school crisis preparedness guidelines, according to Trump of the National School Safety and Security Services.

He suggests the following steps should be taken in developing a plan:

- Make a bomb threat checklist for school employees answering phones that contain questions to the caller that will help law enforcement officers in their investigation. A list can be obtained by the ATF or a local law enforcement agency.
- School staff should have notification procedures with a list of names of whom they must call in the event of a bomb threat, including school and law enforcement officials.
- Develop search procedures that outline who will search for bombs or suspicious packages and what areas they need to search on school grounds.
- Procedures for how to secure an area where a suspicious item has been found should be part of an overall prevention plan.
- School officials must determine in what situation evacuation would be necessary, how the evacuation would be implemented and where the students should be taken in the case of an evacuation.
- Provide training to school per-
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