Maryland
E·M·S
NEWSLETTER
Vol. 16, No. 6 | For All Emergency Medical Care Providers | Feb. 1990

Children Shooting Children . . .

"Guns are so pervasive here that little children take them to school for show-and-tell," says Barbara A. Barlow, MD, professor of clinical surgery at the Columbia University College of Physicians and Surgeons and chief of the pediatric surgery/trauma service at Harlem Hospital Center in New York City. Dr. Barlow recently spoke to MIEMSS Shock Trauma staff at grand rounds.

Guns became an overwhelming problem in Harlem in the 1970s when New York enacted strict drug control laws with no plea bargaining to try to curb the heroin epidemic. Adult drug dealers began recruiting children to do their dirty work. The crack epidemic hit hard in 1986. Now almost all drugs in the city are sold by children under age 16.

"They put everybody in the city in danger," Dr. Barlow asserts. "Children carry guns and have no qualms about using them. There are no more fistfights; arguments, love problems, or fights are settled by shooting one another." They also shoot innocent people. Children are shot while walking to school, rollerskating, in the playground, walking with parents, or sitting at home near a window.

Harlem is not just a slum. It is a 3-class community: poor and disenfranchised, with many illegal aliens; middle class; and upper class professionals. But according to the pediatric trauma registry, penetrating trauma from gunshot wounds and stabbings are 16 percent of the injuries in Harlem as compared to 4.5 percent nationally. In Harlem, 38 percent of

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Looking at Violence and EMS

An early record of violence is described in Genesis, when Cain slew Abel and heard: "What have you done to your brother?" As scientific and technical knowledge has expanded over history, unfortunately, so have the mechanisms of violence.

With increasing attention being focused on violence in our society, several of our readers suggested that we devote a newsletter issue to violence and EMS. While the role that drug-related violence plays in EMS and in demands on health care services is beginning to be discussed, a word needs to be said about violence and aggression as aspects of human behavior. Violence and aggression are not simply different phases along a continuum of human behavior, but they are very different human behaviors.

Aggression is defined by some as "a forceful action or procedure, especially when intended to dominate or master." This may be viewed on a continuum with assertiveness. As Konrad Lorenz pointed out in his book *On Aggression,* aggression throughout the animal kingdom is a behavior used to protect one's home, land, and family. The goal of aggression is not to inflict injury, but to protect the individual and family. Lorenz pointed out, however, that human beings are perhaps the only species on earth which actually kill their own species. This is violence. When weapons were simple (such as clubs), the communications processes between individuals were likewise face-to-face. A facial signal of submission or retreat, even as simple as raised eyebrows or widened eyes, would often provide enough feedback that no further aggression was necessary. However, as weapons and wounding became more remote, with gunshots or missiles, the feedback signals between individuals occur but are not effectively communicated. This allows aggression to break down into severe violence.

While many may view violence as a "fact of life," violence is not shared by non-human animals, nor should it be considered an accepted fact of human behavior. While EMS providers and other health-care providers have an obligation to treat all who need care, regardless of the nature of their illness or injury, and human behavior is not

easily changed, we must understand the difference between aggression and violence.

A special burden on EMS providers is to deal compassionately with the victims of violence, sometimes in a milieu in which human life has been devalued by the very presence of inhumane violence. We hope that some of the discussions in this issue are of benefit in sharing both information and ideas.

◆ *Ameen I. Ramzy, MD*
State EMS Director

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the children are shot intentionally, 22 percent are shot accidentally (playing with guns, etc.), and 40 percent are shot in street violence, caught in a crossfire.

"As to who pulled the trigger–66 percent were children under age 16; 95 percent were under age 19. It is truly children shooting children," Dr. Barlow laments.

Children brought into the trauma center often don't want to get undressed because their clothes are full of crack vials. Sometimes the police leave the vials in place, because they know what will happen to the children if they don't. The children will be shot if they don't pay the drug pushers for the vials.

In 1987, one percent of children admitted to the hospital had cocaine in the urine; since 1987, 10 percent have, and about one-third of gunshot victims have it. This does not mean that the children are taking cocaine; if they spend time in a crack den the smoke carries crack to the urine. "We now do urine studies on everyone who comes in, even babies. We find traumatized infants with seizures who have crack in the urine. These infants were in crack houses and must be placed in safer surroundings."

Children who deal drugs tend to drop out of school. They earn as much as $3000 a week and walk around with big bankrolls in their pockets. Even though they know they are in danger, they say, "Well, Doc, this is my profession. I can only do it till I'm 16 years old. I have to earn my money now because there is nothing else out there for me." Unless the children's injuries are so severe that they see they are in mortal danger, they don't want to change their way of living. In some cases they may be supporting the whole family.

Sixteen-year-olds and some 15-year-olds are now being charged by the law as adults. But they are sentenced as children; even if they commit murder, they are sent to a juvenile facility for 6 months and are released. Enforcement is a problem; there are no rehabilitation centers to which they can be sent.

"We admit all children with gunshot wounds. We found that, if we sent them home after treatment, a certain percentage of children with grazes would return dead later. We now assume that a gunshot wound is an indication that there is something wrong in the child's environment. We call the school, investigate the family, and do anything we can to prevent the child's death." Harlem Hospital gives the child the full impact of medical and social services; it is staffed 24 hours a day by attending pediatricians and has a full team of social workers, psychiatrists, and rehabilitation services. Only children with spinal cord injuries are sent elsewhere.

Infections and high lead levels are common complications of gunshot wounds, particularly shotgun wounds. Accessible bullets, particularly those in bone or in contact with joint fluid, are usually removed so they won't cause lead poisoning or abscesses later. Bullets carry debris in with them; it is possible to tell the color jeans the child wore when he was shot through the abdomen from the fibers in the wound. If the child is stable and does not need an emergency operation, the wound is cleaned, studied, and treated with antibiotics. The bullet is not removed until the swelling goes down.

Gunshot wounds are much more of a problem than stabbing wounds in torso injuries. The stable patient is managed by doing a total workup, possibly with ultrasound, endoscopy, or angiography; CAT scans are seldom used for penetrating wounds. Dr. Barlow emphasizes the importance of multiposition x-rays; a bullet trail might look different when seen from a different angle. The course of the bullet is not always straight.

Luckily children are brought into the hospital within 15 minutes; EMTs and paramedics are stationed all over the community. Response time is 2-3 minutes. The medics have been trained by pediatric surgeons and a paramedic coordinator. Many children would not have survived if not for the immediate access to comprehensive care. Of all the children who arrive at the emergency department alive, 97 percent survive. Those who die usually have brain injuries.

The trauma team from the adult trauma service helps the pediatric trauma service when extra hands are needed. The adult trauma team has 8 attendings and 15 residents; the pediatric trauma team has 3 attendings and 3 residents. There are also subspecialties available.

It is hard to get a legal handgun in New York City; one must wait, be fingerprinted, and go before a judge. However, according to Dr. Barlow, you can go to any street corner in Central Park and buy one for $25. "It is no good if you can drive across a state line and bring guns back; people are only too willing to go. Even children go south, pick up a load of guns and bring them to New York City. *The only way to solve the problem is to have nationwide gun control legislation.* I grew up with guns and I was a junior member of the NRA, but I can't tolerate what is happening now. The guns are not used for hunting; they are used for shooting civilians and police. A child living in Harlem has a 1/1000 chance a year of getting shot; 25 percent of all children under age 16 who die of injuries in New York City die of gunshot wounds. It is absolutely a major health crisis in New York City and it is spreading throughout the country. Drug dealers know that the police are watching for them on the usual route down south; they are now using Lancaster County, Pennsylvania, an area where Amish and Mennonite farmers have always lived peacefully, for their safe houses."

Dr. Barlow and her colleagues are trying to educate children about firearm safety. They devised a school curriculum for teachers of grades pre-kindergarten to 12; it will be taught this year. "As children watch TV programs and see guns and shooting as part of their everyday lives, they become desensitized. When they shoot someone they say, 'The gun just went off,' not 'I shot someone.' They don't make the connection between their gun and what they are doing. We need to resensitize children against violence.

"The surgeon general needs to be as responsible about gun control as toward smoking. The media has become responsible about not showing people smoking; they need to do the same with guns. Children need to know about firearm safety. Do you know what is in the homes where your children are playing? Do you know whether the parents lock up their handguns? Do they keep the ammunition separately? I'll bet you don't know."

Dr. Barlow's group has a privately funded injury prevention program at the hospital, which brings in good role

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models for children and tries to keep the children off the streets, safe, and busy. They talk and interact with the children; have established the first Little League baseball team in Harlem in 20 years; and run a baseball clinic all winter to keep them busy over the weekends. There were about 120 children registered this year; 340 are registered for next year.

The pediatric service started an art studio in a beautiful location on the 17th floor of the hospital overlooking all of Manhattan; children may paint when they are inpatients and may come in 3 times a week after discharge. The children have professional shows in galleries and sell some pictures. They paint out their anguish, frustration, and unhappiness; it helps them cure themselves. The change in the paintings over time is very interesting; pediatric psychiatrists follow the children's emotional healing through their paintings.

For 14 hours over the weekend, 72 children take part in an outpatient dance clinic that takes all their time and energy. To join this group a child must bring in a report card to prove that his/her grades are good. They have danced for the United Nations and at Lincoln Center and have traveled outside the country. They have performed at the New York City Center for 2,000 people, have received scholarships from the Dance Theater of Harlem, and have interacted with internationally known children's dance companies.

"People ask me why, as a surgeon, I'm involved in all this. The answer is, I can't stand sewing up holes in children anymore. We have to show the children another way; they have been seeing only the way of the street. The more they are exposed to, the more they can serve as role models to their friends, and we can keep them from being injured. I think this self-esteem program for children will work. The community is getting interested.

"We'll keep following these children to see what happens to them. Of the 600 children who started the program and have been in it for a year, none has been injured. Normally, 1/100 gets injured each year, 10 times the national average. None has dropped out of school so far, and we usually have a high dropout rate. We are also working on the 120 parks in central Harlem that were previously full of derelicts and junkies. We organized the community and have been taking back the parks one-by-one, having healthy activities for children and parents. This is important, because children who play in the street get caught in the crossfires or get run over.

"It is unfortunate that in this society 'top gun' is valued and 'gun-shy' is derided. There must be a change in societal attitudes. Children are shooting children and we, as adults, must do something about it. Strict nationwide gun control would do something eventually. It is not a children's problem; it is up to society as a whole to do what it can to stop it."

◆ *Erna Segal*

Examining Gunshot Wounds

John Smialek, MD, chief medical examiner for Maryland, recently spoke at MIEMSS Shock Trauma rounds. He described areas of common interest for surgeons and forensic pathologists in the examination and treatment of gunshot victims. An understanding of patterns of injury can help physicians interpret the wounds presented to them in the admitting area or emergency department. Some surgical procedures interfere with the conclusions that can and cannot be drawn by forensic investigators.

When a handgun is fired, the cartridge explodes within the weapon and several products of that explosion leave the end of the muzzle. The first is a large amount of gas produced by the explosion. The second is gunpowder: some powder burns completely and leaves as a cloud of smoke, while the remainder burns incompletely and leaves as individual particles. These particles release their kinetic energy when they strike a target, creating a pattern called "stippling" or "tattooing." As the bullet travels through the barrel, particles of lead are shaved off and also leave the gun.

These products are discharged from the muzzle in a pattern that can be used by investigators in establishing how far away a gun was from an individual when it was fired. That is important, for example, when seeking evidence of a contact wound to support a conclusion that a death was a suicide.

When the muzzle of a gun is pressed tightly against the head, all products of the explosion are forced into the wound created by the missile. All the gas is driven beneath the skin. It separates the skin and the subcutaneous tissue from the skull, and part of the scalp is lifted off the bone. As the gas disperses, the skin tears, deforming the entrance wound from a small circle to a stellate shape. The completely and incompletely burned

Handgun discharging gas, smoke, gunpowder particles, and metal shavings.

gunpowder is driven into the depths of the wound and is not seen on the surface of the skin. During the forensic investigation, sections of the wound are obtained for histologic examination. Black residue at the microscopic level of subcutaneous tissue and muscle supports the conclusion of a contact gunshot wound.

When a weapon is fired in contact with the chest or abdomen, the tearing effect seen in the scalp is not produced because the cavities absorb the gas as it expands. The stellate pattern does not appear.

If gunpowder is found on the skin, this indicates that the gunshot was not a contact wound. The amount of gunpowder residue on the skin indicates how far away the person was from the weapon when it was fired. This information is used by the medical examiner in helping the police reconstruct how a shooting occurred. Was the victim struggling with an assailant? How close were they when the shot was fired?

When a weapon is fired, gunpowder and primer residue can escape from the cylinder if a gap is present. They can be deposited on the hand of the person who fired the gun. The police are looking for primer residue (not gunpowder) when they "take a swab" from a person's hand. This residue is not visible to the naked eye. The powder may be covered by

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Examining, Interpreting Gunshot Wounds

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blood. The blood splatter pattern is also characteristic of contact injuries. In certain types of self-inflicted gunshot wounds to the head, the blood splattered from the wound will spray onto the hand holding the gun.

If the muzzle was 1 to 2 inches from the person who was shot, the effect of the gas entering the defect is not seen. However, the gunpowder residue is distributed on the skin around the entrance. When the muzzle is within 18 inches of the skin, partially burned gunpowder particles can reach the skin. The closer the gun, the denser the pattern on the skin. In some cases, the skin is free of powder because the particles have been deposited on clothing such as a hat or shirt over the entrance wound. Only the larger gunpowder particles that had enough energy to penetrate the fibers are seen on the skin. If the forensic investigator does not examine the clothing, determination of the distance between the gun and the victim may be compromised. It is important for prehospital and emergency department personnel to recover the clothing that the victim was wearing at the time of the shooting as important evidence in a subsequent legal procedure, as long as this does not delay patient care.

The greater the distance between the victim and the muzzle, the less likely it is for the smoke to reach the skin. Beyond 6 inches, soot or smoke usually will not be found. Only larger gunpowder particles with enough energy to reach the skin will be deposited. With increasing distances, the distribution becomes wider and less dense.

More precise estimations of distance can be made by test firing weapons and ammunition recovered by the police. By firing a weapon at different distances from a target, investigators can reproduce deposits of gunpowder residue.

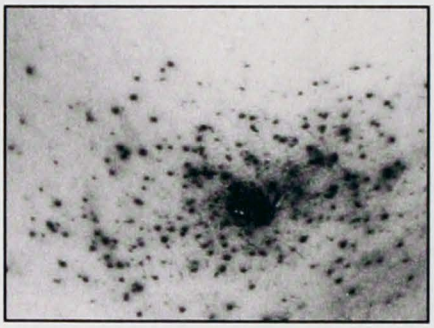
A confluent pattern of gunpowder particles indicates that a large amount of powder was in the cartridge. Wounds created by a .38 caliber cartridge, for example, and a .38 special or .38 magnum are very different. The names refer to the amount of gunpowder in the cartridge; increasing the amount gives the missile higher velocity and causes a greater degree of wounding.

High-powered weapons used with hunting or military ammunition typically cause huge, deformed exit wounds. Entrance wounds are similar to those created by other weapons. Extensive destruction is inflicted within the body cavity by the energy from the missile.

Another important component of the medical examiner's work is distinguishing entrance from exit wounds. The characteristic that identifies an entrance wound is the collar of abrasion. This is caused by the edges of the skin rubbing against the missile as it indents the skin and then passes through. The edges of the epidermis suffer a friction injury.

Exit wounds do not have abrasion collars. They are typically stellate or triangular wounds.

The medical examiner should be informed of the surgical interventions performed on a patient. Dr. Smialek illustrated this point with a description of events following the assassination of President Kennedy: "The first shot had entered the back of the president's neck and passed out the front of it.



Gunshot wound surrounded by stippling caused by gunpowder particles.

Surgeons at Parkland Hospital used the exit wound to establish an emergency tracheostomy. The naval pathologists in Bethesda, who were performing the autopsy, were not immediately informed of the procedures done in Texas. They failed to recognize the exit wound, which was obscured by the tracheostomy. This created a huge problem in their initial report: they had not identified an exit wound in the front of the neck. Not until the day following the autopsy did details of the hospital treatment became available. The pathologists' initial release of information to the media has become the source of material for many authors, who are constantly reinterpreting these wounds."

The interpretation of wounds is complicated by the passage of time. If the victim remained at the shooting location for hours, the marginal abrasion may dry and alter the appearance of the edge of the wound. A dry exit wound may appear to have an abrasion collar and thus look like an entrance wound.

Many gunshot entrances are not typical entrance wounds because the missile strikes another object before it hits the skin. The missile is deformed when it is fired through a window or door, if it hits a pen or key in the victim's pocket, or if it strikes a bone. It tumbles and creates an entrance wound that is not a neat, round hole. Although the wound is deformed, the abrasion collar can still be seen.

An exit wound pressed against a solid object (a shored exit wound) may be difficult to interpret. If the victim is leaning against a wall or lying on the floor or a sidewalk, the exit wound is supported by the firm surface. As the missile exits, the skin is forced against that object, resulting in an abrasion, as in an entrance wound. The medical examiner needs to know the position in which the victim was found.

Dr. Smialek cautioned surgeons: "You should avoid making firm statements about the location of the assailant based on gunshot wound paths. Many trajectories are possible through mobile body parts such as the head. The assailant could have been in one of many positions, depending on how the head was tilted.

"You should not comment on the caliber of the missile with an x-ray film as the only 'evidence.' The outline of the missile is magnified as the rays pass through the body; the image does not represent the missile's actual size. You can do more to compromise a police investigation by giving inappropriate information than by saying that you cannot tell."

The caliber of a missile cannot be estimated by the size of the hole it makes on the skin. The skin is elastic. A large missile stretches the skin, which then retracts.

Rounds are held each morning at the medical examiner's office. Physicians who would like to follow-up on patients they treated may attend these meetings to share information and receive feedback from the pathologists' investigation.

◆ *Linda Kesselring*

Prehospital Providers Helping Med'l Examiner

Prehospital care providers may be able to help the Medical Examiner's Office with information that may not be available from other sources. Charles P. Kokes, MD, deputy chief medical examiner, explains, "We feel strongly that prehospital providers must focus their attention on saving lives, not playing detective. But it would be helpful if they were aware of their surroundings."

Examples of awareness include noticing logical things at the scene of purported suicides. For instance, if a person was hanged, is there some indication as to how the person reached the necessary height, such as a stool kicked over? If the person was shot, was the gun far away on the other side of the room? Inconsistencies might indicate that the story of suicide should be further investigated; the authorities should be so informed.

In a car crash where one person was killed and another survived, the survivor might try to escape blame by claiming that the deceased person was the driver when he was not. It is helpful if ambulance personnel indicate the location in which the people were found: Which seats were they in? Were they belted in? Were they found at the side of the road? The Medical Examiner's Office can do a scene reconstruction to determine the sequence of events. Runsheets are not routinely sent to the Medical Examiner's Office, but they may be requested under certain circumstances.

"Do not–under any circumstances – throw away the patient's clothing or shoes, no matter how useless they may seem," Dr. Kokes emphasizes. This occasionally happens in ambulances or emergency departments. It is sometimes necessary to cut away the clothing to administer treatment, but whatever the patient was wearing should come in with him. What looks useless to an untrained observer may yield a wealth of information to a trained examiner.

For example, a person wearing a sweatshirt has a gunshot wound to the chest and is purported to be a suicide. It is critical to examine that sweatshirt to determine if that conclusion can be corroborated. If the clothing does not come in with the patient, the evidence is lost.

In a car crash, prehospital personnel should be aware of the location where people are found.

Another example of the importance of bringing in clothing is in the case of someone struck by a car and run over by a second car. Oil stains on the clothing or fibers on the cars might tell the whole story; without the clothing they become inconclusive evidence.

"We are not trying to make death investigators out of medical personnel," Dr. Kokes says. "We just want you to know that the Medical Examiner's Office might want to ask you some questions."

◆ *Erna Segal*

Penetrating Trauma, Drugs, AIDS

The scene is the Johns Hopkins critical care resuscitation area but it might as well be any urban trauma center in the United States; penetrating trauma victims are much the same everywhere. The typical penetrating trauma victim is likely male, probably poor, and has been injured by a handgun. Chances are at least 1 out of 5 that he is infected with the AIDS virus and more than 4 out of 5 that he is under the influence of some combination of alcohol, marijuana, heroin, and cocaine. How should we as providers address the societal problems typified by such patients?

Good trauma care must be bold, but not fearless; timely, but not careless. These ideals are best achieved by a disciplined and organized trauma team led by a knowledgeable surgeon or emergency medicine specialist. No matter how urgent the problem, the team leader must ensure that each member practices the universal precautions appropriate to patient management during which blood and body fluids may be spread in an uncontrolled fashion. Each team member should practice donning cap, goggles, mask, gown, and shoe covers so that this is accomplished quickly when seconds count. Only essential sharp instruments should be near the patient, and several safety disposal containers should be strategically located so that needles can be discarded.

How real is the AIDS risk to the provider? The virus is clearly infectious, but the risk of transmission appears to be low (perhaps 1 infection in 1,000 needle sticks), according to the best available studies. Needle sticks nevertheless do occur, and providers are well advised to exercise care and especially to seek vaccination against the hepatitis B virus which is highly infectious and which is common among drug abusers; its complications can be lethal.

Drug withdrawal syndromes have become common among urban trauma victims. A comprehensive toxicological analysis of blood and urine obtained at the time of admission is essential medical information for the physician who days later is confronted with a febrile, agitated patient with no apparent infection. Such drug withdrawal syndromes are far more easily prevented than controlled.

Wounds are more severe these days – .22 and .32 caliber handguns have given way to the 9 mm cartridge and the magnums. Shotgun and high-powered rifle wounds are no longer rare. The increased tissue destruction is often associated with an increase in

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Responding to Violence; Responding to Stress

Recent research by Jeffrey Mitchell, PhD, and others has demonstrated that there are a number of "critical incidents" that cause "critical incident stress responses." These incidents include such events as serious injury to or the deaths of fellow officers, workers, or children. One question for follow-up investigation is the effect of violent crime on first responders.

Violent crime usually has several characteristics that are capable of raising the stress level when one responds to the scene. The first characteristic is violent crime "in progress" or when termination of the incident is not known. Violent crime "in progress" means that weapons are in use. The first fact that must be dealt with is the possible threat to one's personal safety and life. In a recent incident, a family had not been heard from for more than 36 hours. Since it was known that the family had not planned any trips, it seemed reasonable that they were in the house. Police responded after dark and knew they had to force the door. Officers reported that the worst part was knowing that the only thing they could see was the small area where the flashlight shone. They saw the legs of a victim. Was the perpetrater still around? Until the house was searched and lights were turned on, their heart rates and respiration rates were up, and they had sweaty palms.

A second characteristic is that violence often involves repeat victims. Domestic violence, most often against women, is one of the more troublesome. When the address is called on the radio, there is frequently an "Oh no, not again!" response. In these situations, responding to the scene generates a sense of helplessness (which is a lousy feeling). The call is frequently initiated by a child or a neighbor. By the time police and EMS personnel arrive, the incident is over and the effects are left—cuts, bruises, and sometimes a bloody mess—and the victim often will not identify causes or describe the attack or press charges. In the past, the feeling of helplessness by the first responder would persist long after the call. Today there is a response to the helplessness. Now there is the availability of women's refuges or family violence centers and programs; also, there is educational information that first responders can share with the victim in the hope that the victim will learn that the violence is wrong. Today's victim does not have to endure it, and there are shelters for victims of violence.

A third factor is becoming more evident in areas such as Washington, DC, where violent crime has increased at a rapid rate. This factor is the conflict of personal expectations meeting the reality of street life. There are two sets of expectations that influence an accumulated stress response. The first is that persons often enter police service with the expectation and the hope that their presence on the street will make a difference and that they as officers will be able to do something to stop crime. Police officers respond day after day; they pick up suspects day after day; and the muggings, the robberies, the assaults, and the killings continue day after day. If the crime continues day after day and one cannot stop it, then one has to reevaluate one's expectations and hopes. Sometimes the answer is "being an officer is a job, and I go to the job, and when the job is over I go home, leaving my job worries at work." However, many officers really do care too much and continue to bring the worries home. If this occurs, one's sullenness and being noncommunicative can become a family problem.

The second expectation is "they are the bad guys and we are the good guys." The hard lesson is that in many instances the "good guys–bad guys" concept does not work. One example is a kid who has no parent at home during the afternoon and evening and who is using drugs and trying to sell them to support his habit. His parents may have to work evenings; they may be separated or divorced; they may be sometimes abusive; or the money the child earns may also buy food or clothes. There is a sense of right and wrong but not "good guys–bad guys."

The necessity of continually having to face these problems without a readily available method of solution is one basis for accumulated stress. As the stress builds, a less severe situation will trigger a critical incident stress response or a severe situation will trigger a stronger critical incident stress response. Conversations with EMS and police personnel indicate one situation that illustrates the latter response. It is difficult to control one's reaction when responding to violence toward a child or fellow officer when the perpetrator is present. In one case, a live-in boyfriend was known to be abusive toward a young child. The abuse finally resulted in the child's death. Both the EMS responder who had to bring out the child and the police officer who made the arrest reported that there was a strong desire to attack the suspect (who was at the scene and admitted he was "a little out of control"). Both the EMS first responder and police officer required support at the scene to deal with their anger, and both indicated the need to work through the stress response later.

Critical incident stress responses are capable of interfering with one's work and with one's family/social life. Just as there are treatments for the victims of violent crimes, there is now a service for those having to deal with the occurrence of violent crimes. This service is the Critical Incident Stress Debriefing (CISD) program–a team of volunteer professionals and first responder peers specifically trained to understand work-related stress responses and to help first responders deal with the critical incident stress before it becomes disruptive in their lives. This CISD service is only a phone call away. The team can be accessed through SYSCOM (301-328-3156) or through the EMS regional administrators.

◆ *Lee B. Ross, PhD*
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Frostburg State University
Region I Coordinator
Maryland CISD

Estepp Takes New Position

Prince Georges (PG) County Executive Parris N. Glendening recently announced that Fire Chief M.H. (Jim) Estepp has assumed the position of Deputy Chief Administrative Officer for Public Safety, overseeing the operation of public safety agencies including fire, EMS, police, corrections, and emergency preparedness.

Chief Estepp began his career as a volunteer in fire/rescue services in 1958. He joined the PG County Fire Department in 1962 and worked through the ranks to chief, a position he held for 12 years. He is now serving as president of the 10,000 member International Association of Fire Chiefs (IAFC).

In his role as president of the IAFC, Chief Estepp recently sent a letter to William J. Bennett, director of the National Drug Control Policy Board, outlining the impact of the "drug plague" on the nearly 2 million career and volunteer firefighters and paramedics. These first responders walk unarmed into extremely dangerous situations and "take incredible risks to provide emergency rescue, medical, and fire suppression services to whoever is in need." For example, fire and rescue personnel must deal with the unpredictable behavior of people who have taken drugs, with the violence associated with revenge-motivated arsons and bombings that are increasing as a result of drug "turf battles," and the disposal of extremely flammable, hazardous materials used in the manufacture of drugs. Chief Estepp noted the importance of integrating local fire and rescue services into the national "war on drugs." He noted the need not only for federal monetary assistance but also for the sharing of training and informational resources with the local fire/rescue services.

New PG Co. Fire Chief

Former Deputy Fire Chief Steven T. Edwards, a 21-year veteran of the county fire service, was recently confirmed by the county council as the new Fire Chief of Prince Georges County. He has held every position in the department, beginning with High School Cadet. Among his awards, Chief Edwards received the Gold Star of Valor in 1979 for his heroic rescue of two firefighters. By appointment of the governor, Chief Edwards serves on the Maryland Fire/Rescue Education and Training Commission.

Western Maryland Trauma & Disaster Short Course May 5-6 Garrett Community College

For information, call 301-895-5934 or 301-826-8636. Preregistration closes April 11.

CISD Survey Underway

Research is underway in 1990 to evaluate the Maryland Critical Incident Stress Debriefing (CISD) Program. Emergency services personnel involved in critical incidents may be asked to participate in a written questionnaire about stress. Participation is voluntary and affords no benefit to volunteer subjects. Participation or nonparticipation with the research will in no way affect services available from MIEMSS or the CISD team.

This research is being conducted by the University of Maryland School of Social Work in cooperation with the psychosocial services division of MIEMSS. For further information about the study, contact Ogden Rogers, the principal investigator, at 301-435-4721 or Marge Epperson-SeBour at 301-328-6416.

Penetrating Trauma, Drugs, AIDS

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the rate of blood loss so that rapid infusion (up to 500 cc per minute or more) is frequently life sustaining. Large bore intravenous catheters, tubings, and pressure delivery devices are comparatively inexpensive and increasingly important in the management of penetrating trauma.

On a broader scale, there *are* things we can do about guns, drugs, and AIDS.

Irrespective of one's position for or against "gun control," we can all agree that a gun which has been used against another human being other than for self-defense or law enforcement or international conflict has fallen into the wrong hands. There is no place for handguns in grade schools, in bars, or in the hands of convicted felons. Crimes involving the use of a gun should be punished severely with jail sentences to the full extent permitted by law. Judges and legislators are elected officials and their records on such issues are available for public inspection. Cast your votes for officials whose records reflect your concerns about guns in the wrong hands.

We need to convince our young people that intoxication is not a glamorous state of mind and convince our legislators that barkeepers and tavern owners should be held responsible for the actions of their patrons if an intoxicated state leads directly to personal injury. A drunk with a gun is just as dangerous as a drunk behind the wheel of a car.

Drug money is easy money and it is no surprise that many of our penetrating trauma victims have been involved in a drug transaction gone sour. Half-hearted efforts at drug control are worse than no efforts at all. Either intoxicating drugs should be broadly legalized for government distribution to remove the profit motive, or their sale, distribution, and use should be associated with punishment sufficiently effective to deter.

Then there is AIDS. The AIDS carrier who is a victim of penetrating trauma is most often an intravenous drug abuser. Irrespective of one's position on the best strategy for drug control, eliminating needle sharing by the easy availability of sterile, one-time use equipment could make a significant dent in the rate at which AIDS is spread through this population.

None of my concerns deters me from my chosen profession as a trauma surgeon. I can think of no other branch of medical care where one so often has the opportunity to rescue a 20-year-old and give him the chance for another half century of life.

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Published Monthly
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Maryland Institute for Emergency Medical Services Systems
University of Maryland at Baltimore
22 S. Greene St., Baltimore, MD 21201-1595

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MIEMSS, *Maryland EMS News,*
22 S. Greene St., Baltimore, MD 21201-1595

DATED MATERIAL

Mr. Yuk Is Focus of National Poison Week

Green-faced Mr. Yuk is 15 years old this year—and that gives many children something to celebrate. Since young children cannot read warning labels, Mr. Yuk stickers placed on harmful substances have been helping Maryland parents to poison-proof their homes. The Maryland Poison Center (MPC) at the University of Maryland School of Pharmacy, a MIEMSS consultation center, introduced the poison-warning stickers in 1975, with funding from the Randallstown Jaycees, Blue Cross/Blue Shield of Maryland, and the School of Pharmacy. He is now labeling poisons in a quarter of a million households.

The MPC will again focus on Mr. Yuk during National Poison Week (March 18–24). The Mr. Yuk campaign uses a dual approach: preventing unintentional poisonings by the identification and labeling of harmful items, with an educational program that Mr. Yuk means "Do not touch" for grades kindergarten through 3, and facilitating emergency treatment if a poisoning should occur. The sticker gives the MPC phone number; parents/caretakers are urged to take the harmful product to the phone, call the MPC, and give the necessary product information to the poison specialist. Prompt reaction facilitates emergency treatment and minimizes the severity of the exposure.

Mr. Yuk stickers are meant to be part of a total poison prevention program; they should not replace common sense.

In 1989 there were 56,000 calls to the MPC. Most were about nontoxic or subtoxic exposures and could be managed in the home. Many could have been avoided with more active poison prevention (including the use of Mr. Yuk stickers) by parents. Children should be taught that they must ask an adult for permission to eat or drink anything.

Children learn about Mr. Yuk in a PSA produced by MIEMSS in cooperation with the MPC.

For free Mr. Yuk stickers, send a self-addressed, stamped business-size envelope to Maryland Poison Center, 20 N. Pine St., Baltimore, MD 21201.

MPC is available for emergency toxicity and treatment information 24 hours a day to the general public and health professionals by calling 301-528-7701 or 1-800-492-2414 (toll-free in Maryland).

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April 21 & 22

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