

The 46 Missouri children who died of child abuse or neglect during the first nine months of 1992 are just the tip of the iceberg, says Dr. Bernard Ewigman of MU's Department of Family and Community Medicine. A far greater number of children survive abuse and neglect. Those, he believes, are the real tragedies.

All fall down

Story by DALE SMITH



PAMELA LENOX BRADFORD 1992

Investigators of child abuse all "hit the wall" eventually. Late one evening in 1988, Bernard Ewigman, MD '79, MS '85, took his turn. He and Dr. Coleen Kivlahan, MS '83, his co-researcher and wife, were reading case histories at Missouri's Division of Family Services.

"We'd start off with a stack of fatality files this high," says Ewigman, holding his hand three feet off the ground. One baby wouldn't quit crying, and the caretaker stuffed its mouth and nose with black pepper. In another case, a mother stabbed her baby and brought it to the police station. She just set it up on the counter. The child was already dead.

"Finally, I read an interview of a father who had killed his son with a baseball bat. He told the whole thing very clearly, almost matter-of-factly. He hit the boy because he didn't make his bed or something like that, and the boy was on the ground saying 'Please don't hit me.' But he hit him again — eventually killed him. After a while it gets to you and you can't suppress the sadness."

That's hitting the wall.

The team's research on children under 5 years of age revealed that fewer than half of deaths from child abuse and neglect were listed that way on death certificates. Although this degree of underreporting is dramatic, the figures are conservative, says Ewigman, an associate professor of family and community medicine. "Another major finding was that maltreatment was the leading cause of injury deaths." Perhaps just as important was the realization that death investigations were too often incomplete and that communication between agencies such as social services and law enforcement was too often poor.

The results set off a chain of events that led in 1991 to the most sophisticated program in the United States

for reviewing child deaths and preventing further tragedies. Every time a child dies in suspicious circumstances, a local panel of experts including police and social services are activated in that county to review the evidence. Through careful reviews and investigations, the Child Fatality Review Project helped state agencies to uncover twice as many deaths as before they began this close collaboration. Also, panels can take action in their communities, and state vital statistics better reflect the true extent of fatal abuse. More accurate reporting means Missouri's time and money can go where they're needed most. But that's getting ahead of the story.

The study was conceived in 1987 when Kivlahan was clinical assistant professor of family and community medicine at MU and Missouri's director of Maternal and Child Health. Along with an invitation to a national conference on child maltreatment fatalities came a request to bring Missouri statistics on these deaths. Conference organizers planned to compile the first national figures off of hand-delivered documents from all over the United States.

Kivlahan's apparently simple job quickly became mysterious. To begin with, Missouri's center for health statistics counted six maltreatment deaths that year. But not all of those six were among the 20 cases reported by the Division of Family Services, and Kivlahan knew firsthand of three more cases. "Coleen thought it looked like a big underreporting problem, so we did the study," Ewigman says.

During 1990 and 1991, public awareness about the problem rose. Kivlahan and Ewigman's dramatic results prompted Gary Stangler, AB '74, Missouri's social services director, to appoint a task force on reforming the state's approach to suspicious child deaths. Led by state Sen. Joe Moseley, AB '71, JD '76, then Boone County prosec-

cuting attorney and head of the statewide prosecutors association, the task force wrote a report that shaped Missouri's groundbreaking program.

In January 1991, only two months after the report to Stangler, a six-part *St. Louis Post-Dispatch* series added momentum by documenting serious flaws in Missouri's death investigations. The death of a 19-month-old boy from southern Missouri exemplified many of the old system's short-

Who does it

What kind of people abuse children?

"They love their children very much but not very well," says Gus Kollilis of Missouri's State Technical Assistance Team.

Usually, abusers are not mentally ill, says Dr. Bernard Ewigman. "Most of the injuries are not inflicted with hate or intention to kill. Often, the people don't cope well with their problems, and they may not understand their kids or themselves." Some people are ignorant of developmental stages. They may not know, for example, that 2-year-olds are bound to talk back no matter what parents say.

Most children who died were younger than 5 and were killed by their parents. According to Donna Prenger, project administrator of the State Technical Assistance Team, a composite parent might have the following profile:

- A teen-ager caring for the child alone, ill-equipped to do so both financially and emotionally.
- Likely to have been part of domestic violence.
- Recently relocated, recently added or lost a household member.
- Likely to have heavy, continuous child-care responsibility.

And the children? Prenger offers this stat sheet from the margins of society:

- Although only 25 percent of Missouri children are eligible for Medicaid, 53 percent of deaths reviewed by the panels were on Medicaid-eligible youngsters.
- Black children were three times more likely to die of any cause and four times more likely to have their cases reviewed than white children.
- Children were more likely to live in families with high tobacco use and higher alcohol and drug use at the time of the fatality.

What does it all mean? It's too soon to tell the meaning behind these data, Prenger says. But the clues, says Kollilis, point to "lifestyle and environmental causes having an extreme impact on fatalities."

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comings, according to Martha Shirk and Bill Smith's *Post-Dispatch* story: "Dante Mosby was found dead in Portageville, Mo., in Missouri's Bootheel, on Aug. 1, 1984. Walter Ivy, who was sheriff then and was acting coroner for the day, viewed Dante's clothed body at a gas station and attributed the death to unknown natural causes. He released the body for burial, without ordering an autopsy or even visiting his home.

"Had Ivy inquired into Dante's history, he would have found out that he had been hospitalized four times in the previous few months with internal injuries that had been attributed to child abuse. Dante was in the

state's child-abuse caseload at the time of his death."

In addition to news coverage and task force recommendations, Kivlahan, now Missouri's Department of Health director, and Moseley lobbied and educated lawmakers for months before the vote. In May 1991, the General Assembly passed a bill mandating that each Missouri county review the death of anyone under the age of 15. The system is called the Missouri Child Fatality Review Project.

Each county's death review panel combines professionals who previously had no forum specifically for working on child deaths. The core

includes a prosecutor, social worker, police, public health and juvenile officers and a coroner or medical examiner. The following before-and-after case study from a project report shows how the system works.

Before the panels existed, a 5-month-old boy died from what an autopsy revealed to be massive brain damage. Even so, the death was listed as being from natural causes because no other information indicated otherwise. Ten months later, after the review system was in place, his 2-month-old sister died with similar injuries. This death spurred a panel investigation, which revealed earlier child abuse in the family. The father later confessed to shaking the infant and to abusing the first child, whose death was reclassified as homicide. He faces murder charges in the second child's death. Officials charged the mother with endangering the life of a third child, who was placed in protective custody.

Part of what makes the program special are the training and tools that panels get from the project's State Technical Assistance Team. Gus Kollilis, BS Ed '76, a retired St. Louis policeman who directs training and assistance for the panels, worked with the team to develop protocols and checklists for investigators.

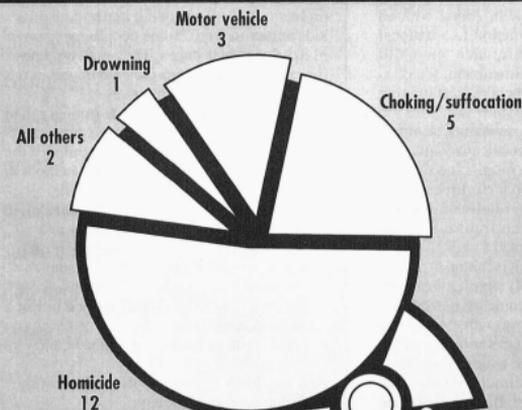
"We were asking panels to do things they'd never done before," Kollilis says. "So we have to train them well so they have the confidence to do what we're asking." One of the tools Kollilis promotes is a series of checklists for death scene investigations, including one for sudden, unexplained deaths of infants. This way, investigators are sure to collect details that are key to the specially trained pathologists who perform autopsies (See the story What autopsies tell).

"If pathologists get a body without good information from the death scene, it's like dropping a car off at the mechanic without saying what's wrong with it," Kollilis says.

During his work with panels, Kollilis also uses slides and case histories to impart a catalog of insights about child abuse and neglect. Though this uncommon knowledge makes for better investigations, these things are at best difficult to know.

"Child deaths are so emotional.

Injury-related deaths for Missouri children under age 1 from January to September 1992



"Young children die more frequently than older children because they are more vulnerable biologically, lack the judgment to avoid hazards and are more dependent on caretakers for protection and nurturance," — Missouri Child Fatality Review Project, Interim Progress Report

During my days as a policeman, I know I always tried to avoid them," Kolilis says. "There's a tendency I've observed that explanations of child deaths are readily accepted. If the parents say their child rolled off the table and quit breathing, people often take it at face value." The same thing happens when parents blame sudden infant death syndrome — "they woke up this morning and the child was dead." But it's crucial that officials stay attuned to clues about child deaths. "These cases are often complex because the abuse or neglect probably happens at home with no witnesses except other family members. The body is often taken to the hospital, rather than staying at the death scene where we can do a better investigation."

Kolilis' slides and cases range from education about neglect — a child too young to sit up can drown in 2 inches of water — to a great deal of graphic information about abuse. Consider the evolution of bruises, which usually are not life threatening in themselves. Kolilis says that abused children frequently are found with loop-shaped bruises, the mark of beatings with extension cords or coat hangers. "Although everyone bruises differently, they are usually red on the first day and purple on the second. On days three through seven, they change from brown to yellow to green. If we see all phases of bruising, it probably indicates a long-term pattern of abuse."

Kolilis moves on to a typology of burns with a slide of a torso marked by dime-sized, red, circular lesions and one much larger spot. "It's difficult even for a physician to tell the difference between the skin disease impetigo and cigarette burns. You have to be careful." Another slide shows a pair of hands scalded neatly to the wrists as though they'd been dunked in scarlet paint. "We teach panels to look for inconsistencies. The parents' excuse for this was that the kid overturned a pan of hot water on himself. But you wouldn't get

straight lines like that."

Somehow, panels have managed to turn their understanding of burns and bruises and these grim histories into something positive.

"By reviewing the deaths of children in their community, they can see risks and take action immediately," Kolilis says. "One panel found several fire deaths in an area and worked to get more fire alarms installed. They become local action committees." Stakes are high because panel members are working in their own communities, Kolilis says. They may even know some of the families in their cases. "They may decide they need to do something."

One town may need something as simple as a stop sign at a dangerous intersection. "Another panel reviewed a case of a teen-ager who was accidentally shot and killed. They realized that this is a national problem and decided to seriously address the need for a place where teen-agers can go for recreation." A third panel found a pattern of infant deaths at the hands of male teen-age baby sitters. "The kid is left at home mad that he has to watch the baby. The infant won't stop crying. Eventually, he picks the child up and shakes it — doesn't take much to kill an infant that way." The panel recognized this pattern and took steps to educate young baby sitters about the dangers of shaking and about appropriate ways of caring

for infants. The ethic of prevention is common among many in the program. "I don't look at all this as trying to get the bad guy," says Jay Dix, MD '77, an MU pathologist. Dix also is Boone County's medical examiner and one of 15 pathologists in Missouri who performs autopsies for the program. "It's more about preventing bad things from happening."

The key, Ewigman says, is education. "The focus on deaths rivets attention on this kind of parenting. But if we can educate people about these deaths, it may lead to changes

in behavior and public policy." All the time spent looking back at tragedy is for the future. "Although these deaths are tragic, what's most tragic are the survivors who are emotionally wounded, who grow up in families without love — children who won't develop productive lives. They have the greatest impact on society. They are unhappy, they make poor marriages, they can't work. These are the people who populate our jails. It's a fundamental problem with having a productive society." 

What autopsies tell

In life, abused children may never say what their bodies reveal in death. Eighty-one percent of cases reviewed by county panels were autopsied by a physician in the Certified Child-Death Pathologist Network, another Missouri first.

"The types of injuries we see in children are things that we don't see as often in adults," says Dr. Mary Case, AB '65, a pathologist in the network. "A child may have fatal damage to the brain with no external indication on the scalp. Or a blow to the abdomen may show no external damage." When children die from being shaken, Case says, bleeding in the retina or at the back of the neck may be a crucial clue to the investigation.

"All the things I've mentioned — blunt trauma to children — we want to document very well. We often do extensive dissections to demonstrate soft tissue damage. Often the only evidence comes from autopsies. We also do more documentation and photography than in adults."

The law that created the network also mandates that autopsies be performed under certain circumstances. For example, all children between one week and one year of age whose deaths are sudden or unexplained must be autopsied. That's unique to Missouri, says Dr. Jay Dix, an MU pathologist and member of the network. Dix says that the system helps ensure that autopsies are performed when needed most. Eighty percent of county coroners in Missouri also are funeral directors in their counties. As coroners, they used to decide alone who would undergo an autopsy. But the new law mandates that coroners make this decision with a pathologist's advice. The autopsy, which costs the county at least \$750, is now paid for by Medicaid for eligible children. This is true only in Missouri, and Dix says, removes another old excuse to forego autopsies.

"Many times, coroners are under a lot of pressure from families not to have an autopsy done. So there's a conflict of interest. But the law has taken the pressure off of coroners. Now they can say, 'It's not me who wants the autopsy, it's that pathologist.'"