America's truckers, pushed beyond their limits in an industry that thrives on low pay and long distances, are driving tired and killing hundreds on the road every year. For decades, government regulators have talked tough about getting weary truckers off the road. Industry leaders say trucker fatigue is a minor cause of accidents. Most wrecks are caused by bad automobile drivers, they say.

But The Kansas City Star, which spent nine months examining truck crashes, found that fatigue is a much bigger problem than the industry acknowledges. Sometimes hallucinating, sometimes nodding to sleep after driving 20 hours at a stretch, drivers continue to drift their 40-ton rigs into oncoming traffic, plow through tollbooths or crash into the backs of slower vehicles, sometimes wiping out entire families.

Moreover, the government inspection system designed to save lives is ineffective when it is operating at all -- which isn't often.

More truckers continue to die in accidents each year than workers in any profession in America. The number of people killed in all large-truck crashes has climbed above 5,000, totaling 5,211 last year, or a daily average of 14 deaths. That's not counting 140,000 injuries last year.

Julie Anna Cirillo, the government's chief truck-safety officer, acknowledges that the death toll is far too high.

"Fifty-two hundred lives is like an airplane crashing every two weeks," she said.

Among The Star's findings:

The trucking industry not only downplays fatigue, it wants to lengthen the hours truckers can drive at a stretch -- based on a study that the industry itself helped conduct.

Federal inspections of trucking companies are so few that three-fourths of all carriers have never been visited. And completed reviews are so weak that companies with documented problems continue to operate without sanctions.

The inspection stations so conspicuous on the nation's highways are frequently closed and officers are overworked, allowing the average truck to travel more than 80,000 miles between inspections, a Star analysis shows. Many are driven by sleepy truckers who would be ordered off the road if they were pulled over.

Meanwhile, the highways are getting more crowded. After Sept. 11, more families have chosen driving over flying, boosting the percentage of road travel this past Thanksgiving to the highest point in years. That might be a short-lived phenomenon. But more significantly, both the government and the industry predict truck traffic will increase 20 percent in the next decade.

And that's not including NAFTA. President Bush is expected to sign a bill that will open the U.S.-Mexican border early next year under the North American Free Trade Agreement. That would bring thousands more trucks onto the nation's highways from a country whose safety regulations already are weaker than the troubled U.S. system.

Trucking officials point out that fatality rates -- the number of fatalities compared with total miles driven by truckers -- are at an all-time low. Even though 2 million more trucks are on the road, 700 fewer persons were killed last year than in 1980.

"Safety is a number one priority for this industry," said Mike Russell, spokesman for the American Trucking Associations, which in a year will be led by Kansas Gov. Bill Graves. Russell noted that several trucking companies have used innovative technology to reduce crashes.

But the fatality rate is lower largely because passenger vehicles have become safer, industry critics say. Since 1980, anti-lock brakes and air bags have become common while use of seatbelts has increased sixfold to 69 percent.
After falling steadily for years, the truck fatality rate has remained almost unchanged since 1995. Indeed, the number of trucks involved in fatal crashes has increased 10 percent since then, federal statistics show, and the number involved in injury crashes has jumped 20 percent. Congress, too, has been unimpressed by the lower fatality rate.

Alarmed that trucks -- only 4 percent of all vehicles -- were involved in 13 percent of all traffic deaths, lawmakers created a new truck safety agency in 1999. Then they ordered it to cut truck-related fatalities in half in 10 years.

The new agency didn't meet its 2000 goal of dropping fatalities below 5,000.

"The Congress has got to do more to deal with these problems," said Rep. Frank Wolf, a Virginia Republican and former chairman of the House Appropriations Subcommittee on Transportation. "If we don't, people will continue to die on the nation's highways."

Long hours

Fatigue is a touchy issue for the trucking industry. The industry trains drivers about the dangers of fatigue but does not believe that it's a major cause of accidents. In fact, the industry wants to lengthen the hours truckers can drive without taking a break.

Federal law limits truckers to 10 hours of driving or 15 hours on duty with mandatory eight-hour breaks. Those hours are supposed to include time waiting to load and unload, but truckers often don't log them because they cut into driving time.

The American Trucking Associations, the industry's largest trade organization, proposes letting truckers stay on duty 14 hours -- all of which could be driving time -- followed by a 10-hour break.

After all, the organization says, long hours behind the wheel aren't the biggest cause of fatigue. The industry points to research it helped conduct, including a $4.5 million government study in 1996. The Driver Fatigue and Alertness Study found that fatigue was influenced more by the time of day, not the total hours driven.

Safety advocates said the study was self-serving for the industry.

"Taxpayer money went to the ATA to show us that longer driving hours don't make you tired," said Jackie Gillan, vice president of Advocates for Highway and Auto Safety. "That's like asking the tobacco industry to do an objective study on the effects of nicotine."

Even the industry doesn't dispute that truckers drive long hours. Recent studies show that nonunion truckers -- more than three-fourths of all drivers -- work an average of at least 66 hours a week. And 10 percent put in more than 95 hours. Federal law allows 60 hours in a seven-day period, a regulation that many companies ignore.

In fact, truckers put in so many illegal hours that the industry would need to hire another 130,000 drivers if everyone drove legally, a study shows.

You can see -- and hear -- weariness on the road.

"It'd sure be nice to get a good night's sleep," one trucker mumbled over his CB as he pulled into a Virginia truck stop late one night. "But usually, it's just an hour here or an hour there."

One midnight during The Star's trip, a haggard trucker sat in the truck stop restaurant in Fort Stockton, Texas, downing his third cup of coffee after driving 2,000 miles in 36 hours straight. The driver, who trains other truckers on how to haul hazardous chemicals, said he had left San Francisco at noon the day before, hauling a load of motor oil.

"I'll be home at noon tomorrow," he boasted on this Wednesday night, his eyes bloodshot. "But according to my logbook, I'm not supposed to be there until Saturday."

On the road, drivers often help each other stay awake.
"I was going to Houston one day, and this guy came up behind me," said David Stopper, a truck crash expert who trains federal safety officials.

"He said: 'Just keep talking to me. I've got to make it to Houston, and if I don't keep talking, I'll go to sleep.'

"That's your classic example. He can keep it between the lines, but if something happens out of the ordinary or he's not quite prepared for, the reaction times are so severely increased, that's where they have a problem."

Stopper says a drowsy driver is much like a drunken driver.

A trucker who was having a cup of coffee at an Illinois truck stop said he had fallen asleep while driving a few years ago.

"I remember entering the state, and all of a sudden I was 60 miles past my exit, and my left turn signal was on," said the trucker, who like some other drivers asked that his name not be used for fear that he would lose his job. "And there's all these people lined up behind me afraid to pass and waiting to see what I'm going to do."

**Deadly consequences**

Truckers know fatigue causes accidents. They've seen plenty of them.

In March 1999, Michael Rogers was hauling a load of ice cream bars for a Kansas City, Kan., company when his tractor-trailer veered into the median of the Maine Turnpike.

It was 2:12 a.m., and 52-year-old Giulio Simeti was headed the opposite direction to his job. The semi-trailer charged into Simeti's lane, tipped and sheared the roof off his 1985 Toyota Camry, decapitating him.

Investigators determined Rogers had been driving up to 18 hours at a time in the days before the crash. In February 2000, Rogers pleaded guilty to charges that included manslaughter and logbook violations.

Then he apologized to the Simeti family: "Tired as I was, I shouldn't have been on the road."

An investigator said Rogers might have been hallucinating before the accident.

"He all of a sudden saw brake lights right in front of him, so he hauled it to the left," said Bob McEvoy, who retired last year as the state director of the Federal Motor Carrier Safety Administration's Maine office. "He'd really been pushing."

Some experts say more than half of all truck wrecks are caused by fatigue.

Greg Hardin, a veteran inspector with the Kentucky Motor Vehicle Enforcement Unit who speaks at industry events around the country, puts the figure even higher.

"Seventy-five percent of all truck wrecks are due to fatigue," Hardin told truckers last spring at the Mid-America Trucking Show in Louisville, Ky.

Many other experts believe at least 30 percent of fatal wrecks are caused by driver exhaustion. A 1990 study by the National Transportation Safety Board showed that driver fatigue probably had caused 31 percent of 182 heavy-truck accidents in which the driver had been fatally injured.

"I think that fatigue is probably the biggest factor in all truck accidents," said former transportation safety board Chairman James Hall, who now serves on the board of U.S. Xpress Enterprises, a company with more than 5,000 trucks on the road.

Yet the trucking association says fatigue causes only 3 percent to 6 percent of fatal truck crashes.

Trucking industry officials contend their low estimates are the most accurate because they're based on interpretations of Transportation Department studies. They say some other studies, such as the 1990 federal study, are flawed.

But the Transportation Department itself now puts the figure much higher.
The Federal Motor Carrier Safety Administration, the transportation agency responsible for truck safety, says 15 percent of fatal truck crashes -- accounting for almost 800 deaths annually -- are caused by fatigue.

The trucking association stands by its estimate. "People who don't like the trucking industry keep doing studies until they find one that says what they'd like it to say," said trucking association spokesman Russell.

Trucking officials agree that 5,000 truck-related deaths a year are too many. But they say car drivers, not truckers, cause 70 percent of fatal car-truck wrecks.

"Even if all trucks were operated perfectly, only a minority of the fatal crashes would be eliminated," said Daniel F. Blower, a University of Michigan researcher and author of a 1998 study that produced the 70 percent figure.

And in car-truck crashes where both drivers survive, the car driver is more than twice as likely as the trucker to be cited as the primary cause, said Blower, now the director of the university's Center for National Truck Statistics.

The truck safety agency's Cirillo doesn't buy Blower's 70 percent figure. Either do safety advocates, citing problems in his study. For example, they say, the study only looked at head-on and rear-end crashes, ignoring lane-change and intersection crashes.

They also say that truckers are often the only survivors of a crash, so theirs is the only version of events.

"Dead men don't talk," Gillan said, noting that 98 percent of all persons killed in car-truck collisions were in the car.

Actual evidence of a trucker's fatigue often is destroyed in the crash.

For example, in June 2000, a tractor-trailer exiting Interstate 70 in Columbia, Mo., plowed into a Chevrolet Malibu at 50 mph, crushing the car and killing Robert Thompson and his 8-year-old son, Ryan. The burning wreckage was such a tangle that firefighters didn't even realize that a car had been struck until they put the fire out.

The driver said his brakes had failed, but investigators believe he either fell asleep or was not paying attention. They couldn't determine how long he had been driving, though, because his logbook was incinerated.

The trucker eventually pleaded guilty to two counts of second-degree involuntary manslaughter and was sentenced to four years in prison.

Beyond the confusion of missing evidence and conflicting studies, said Hall, the former safety board chairman, is the bottom line: Fatigue is a problem.

"You can argue over the exact percentages, but obviously a large number of fatal truck crashes are due to fatigue," he said.

Truckers out on the road know that's true.

Jeff Morgan, a trucker from Independence sitting at the counter in an Illinois truck stop, said he had almost flipped his truck once because he began dozing off.

"All of a sudden, you've been on the road an hour and you don't remember any of it," Morgan said.

Terrible wrecks

There's no debate that crashes involving tired drivers can be horrific:

A Los Angeles trucker was driving east on I-10 near Tonopah, Ariz., at 2:37 a.m. on July 1, 1998, hauling 20 tons of juice when he slammed into the back of another tractor-trailer at about 65 mph. The second trailer toppled onto a station wagon. The trucker was killed instantly, along
with six persons in the station wagon, four of them children. Police said the trucker had been exhausted at the time of the crash, driving more than 14 hours without a break.

On June 3, 1999, five persons died when a tired trucker drifted off the road on Interstate 40 in Tennessee, went up an embankment and became airborne. The truck landed on top of an oxygen tanker parked at a rest area, causing an explosion that badly burned the victims.

Tired truckers created one of the bloodiest days ever on Texas highways, federal records show. On July 3, 1994, a tractor-trailer veered off a highway near Weatherford and rammed into the back of a family van with such force that the truck's front bumper reached the van's front seat. The van exploded into flames, killing 14 persons, most of them children. Later that day, near Snyder, another tractor-trailer rammed a pickup carrying three adults in the cab and 12 children in its open bed. Eleven died in that crash, including eight children.

Although they are still being litigated, civil lawsuits allege that a fiery crash that killed five persons this year in Missouri was caused by a tired trucker.

On Aug. 26, a tractor-trailer eastbound on I-70 plowed across the median near Sweet Springs and slammed head-on into a westbound pickup pulling a horse trailer. Three of the victims were children. The driver, John Kendrix, of Moultrie, Ga., was charged with five counts of second-degree involuntary manslaughter and pleaded not guilty. He told authorities he "must have blacked out or something."

Authorities said Kendrix's logbook had not been filled out in two days. Family members of the victims filed the lawsuits, which claim Kendrix was fatigued. Kendrix's attorney, Pat McMonigle, said the trucker did not fall asleep or drive more than the legal hours.

**Burdened system**

It's no wonder so many tired truckers are able to keep driving -- there are big holes in the inspection systems the Transportation Department has designed to pull them off the road. The first line of defense is roadside inspections at weigh stations and in random stops. Officers check vehicles and drivers' logbooks, in which truckers are required to fill out the hours they've worked.

During *The Star*'s 6,000-mile journey, about two-thirds of the nearly three dozen weigh stations the truck passed were closed -- including one on I-70 at Odessa, Mo., which has a reputation among truckers as one of the toughest in the country.

As *The Star*'s truck approached the weigh station -- "chicken coop" in trucker lingo -- the CB radio traffic picked up.
"Hey, westbound, what's the eastbound coops doin'?" a trucker asked another driver, who was headed toward Kansas City.
"Locked up tighter'n a drum," came the reply.

In other states, the weigh stations that were open simply displayed a green light and sent the truck on its way. Not once did anyone ask to inspect *The Star*'s truck or see a logbook. Nor did the reporter see any other trucks getting inspected at weigh stations or in random stops.

Authorities say they conducted 2.4 million roadside inspections in 2000, but they concede that's not an impressive number compared with the more than 7 million trucks on the nation's highways.

Those stops do, however, give a glimpse of the scope of the problem. Inspectors placed about a quarter of the trucks out of service for serious violations, meaning they cannot be driven until the problem is corrected.
And 185,000 drivers -- 8.4 percent of those inspected -- were ordered out of service in 1999, the latest detailed figures available. Missouri shut down 12 percent of drivers who were inspected, and Kansas shut down 13 percent.

The most common driver violations involved logbooks, with nearly 85,000 cases in which the driver either had no logbook or the logbook was not up to date. In almost 36,000 cases, the truckers had driven longer than legally allowed; they had falsified their logs more than 18,000 times.

Those are serious numbers, Cirillo said.

"If you went to inspect United Airlines and you came back and said, 'One in four planes isn't fit to fly,' would you think that was good enough?" she asked. "And if 1 in 10 pilots isn't fit to pilot, would you think that's good enough?"

Alarming as those figures might seem, many drivers told The Star they had not been inspected in months, even years.

"I've been driving 13 months and haven't been inspected once," said Mike Matthews, a trucker from Atlanta who was taking a break at a truck stop in New Braunfels, Texas.

Cirillo says the Transportation Department knows more roadside inspections need to be done, but manpower is the problem.

In 1999, she said, the federal grant program that provides money to help states conduct inspections was increased by 50 percent.

"But relatively speaking, it's still a small program," she said.

**Pattern of problems**

The government's other inspection system doesn't work very well either.

For more than a decade, Transportation Department officers have conducted on-site safety reviews designed to determine whether a carrier is fit to be on the road -- and to force problem companies to improve. But a data analysis by The Star shows:

Three-fourths of the nation's 560,000 trucking companies have never been reviewed, including some that were targets of the department's own tracking system.

Of the nearly 10,000 that have received unsatisfactory ratings, fewer than 200 have been temporarily shut down in the past decade, and some have a pattern of continuing problems.

Other companies received good safety ratings even though they had serious safety problems.

"This is outrageous," Gillan said. "The public is paying for this lax enforcement and regulatory oversight in lives."

Federal officials, aware that relatively few companies have been reviewed, ordered their 250 inspectors last year to begin completing at least four reviews a month. But even at that rate, they won't ever catch up.

"It's frustrating because of the fact we don't have the resources to really address the problems," said Teri Graham, director of the truck safety agency's Kansas office.

Some inspectors say a monthly quota is the wrong goal anyway.

"If you're going to uncover driver fatigue, it takes time -- and many companies are very clever at hiding it," said McEvoy of Maine.

Inspectors should focus on conducting more detailed reviews of companies with known problems, he said.

That's what the agency is doing, Cirillo said.

"We spend the time on a carrier that needs to be spent on a carrier," she said.

Joan Claybrook, president of Public Citizen, Ralph Nader's advocacy group, says it's clear the agency could do more inspections and reviews if it had more money.
"But who wants to give them more money when they can't even competently administer what they've got?" Claybrook said. "They're not using the power they have, the mechanisms they have in place."

**System glitches**
The Transportation Department already has a system to help detect problem companies. SafeStat, established in the mid-1990s, uses accident and roadside inspection data to help rate motor carriers in four areas: crashes, drivers, vehicles and safety management.

In some areas, large and small companies are rated in the same way, with key factors being the percentage of drivers and trucks placed out of service in inspections.

Some owners of smaller companies say it's unfair to rate them on the same scale as companies with thousands of trucks, but truck safety agency officials say small companies -- which make up 80 percent of the industry -- can be just as dangerous.

"It does not make a difference whether they're large or small," said Dave Longo, truck safety agency spokesman. "If the majority of a company's fleet is always having problems or always being involved in accidents, they are a problem."

*The Star* found these problems with the SafeStat system:

**Bad score, no review.**
Carriers with bad scores are supposed to get an on-site inspection. But at least two dozen carriers had poor SafeStat scores and yet hadn't had a safety review in years, if at all.

One company, B & R Trucking, of Ecru, Miss., has a driver out-of-service rate nearly four times the national average. Three of its four trucks were in accidents in the past 18 months -- two resulting in injuries, safety records show.

Brenda Bailey, wife of owner Robert Bailey, said the company had received letters from the Department of Transportation saying inspectors would come for a review, but that hasn't happened.

She says the company has had bad luck with drivers.

"We used to have four trucks, but had so many accidents, we got down to two now," she said.

"This last wreck, the boy ran off the road. We guess he fell asleep."

**Problems, but no review.**
SafeStat's complex scoring system has loopholes that allow other companies to slip through without overall scores bad enough to flag them for a review.

For example, Total Transportation of Detroit has had drivers placed out of service at a rate six times the national average, yet its vehicles had an acceptable record and its score was not high enough to trigger a review. A company official declined to comment.

**Bad review, no follow-up.**
After a compliance review, a trucking company receives one of three ratings: satisfactory, conditional or unsatisfactory. Companies that receive unsatisfactory ratings are supposed to be revisited within six months or less and could be shut down if they haven't improved.

But in more than two dozen cases, inspectors didn't go back.

For example, L.G. DeWitt Carrier Corp. of Chester, Va., received an unsatisfactory rating in February 2000 but has not had a follow-up review since. Records show that since the rating, the company's trucks have been involved in six accidents, injuring four persons and killing one.

The company's safety director says he believes the company has improved. He says he requested a new review in August but has not heard back.

**Problems, but good review.**
Some carriers have received good ratings even though their vehicles and drivers flunked roadside safety inspections at high rates. For example, of the companies with the 100 worst SafeStat scores, 21 have satisfactory ratings. S & M Trucking, of Atkins, Ark., has the 17th-worst SafeStat score in the country and a driver out-of-service rate more than five times the national average. Yet the company received a satisfactory rating after a safety review on Aug. 27. The company's co-owner said the out-of-service rate was high because the company had only 15 trucks. "If you only have two trucks and you fail in one (inspection), you're already at 50 percent," Jack Batchelor said. Batchelor says his company and drivers are "very safe" and that he doesn't pay any attention to the ratings: "I just blow it off." Cirillo said one reason for some of the glitches is that the SafeStat system is based on a complicated mathematical formula. "There's all ways that something could conceivably slip through the cracks," she said. "We've tried to develop this algorithm so the chances of it happening are small. But you do have some aberrations." Cirillo said she wasn't sure why some carriers with unsatisfactory ratings hadn't received follow-up reviews. "There shouldn't be people sitting out there for a long period of time with an unsatisfactory rating," she said. She said it was unusual for companies to have high out-of-service rates but still have satisfactory ratings. She said that a possible reason is that the inspection data can be up to 30 months old. Despite the problems, Cirillo said, she believes the system is a good one. "If you look at all the carriers, by and large, all the at-risk carriers, we do a compliance review on them in a reasonable time frame," she said. But Gillan said the inspection problems must be addressed. "Every day, American families are forced to share the road with poor drivers, poor equipment, that are speeding down the highway. Every day you get out there, it's like Russian roulette." The Star's database editor, Gregory S. Reeves, contributed to this story. To contact him, call (816) 234-4366 or e-mail greeves@kcstar.com.