It takes 25 minutes to turn a live steer into steak at the modern slaughterhouse where Ramon Moreno works. For 20 years, his post was "second-legger," a job that entails cutting hocks off carcasses as they whirl past at a rate of 309 an hour.

The cattle were supposed to be dead before they got to Moreno. But too often they weren't.

"They blink. They make noises," he said softly. "The head moves, the eyes are wide and looking around." Still Moreno would cut. On bad days, he says, dozens of animals reached his station clearly alive and conscious. Some would survive as far as the tail cutter, the belly ripper, the hide puller. "They die," said Moreno, "piece by piece."

Under a 23-year-old federal law, slaughtered cattle and hogs first must be "stunned" -- rendered insensible to pain -- with a blow to the head or an electric shock. But some plants don't always stun properly, with cruel consequences for animals as well as workers. Enforcement records, interviews, videos and worker affidavits describe repeated violations of the Humane Slaughter Act at dozens of slaughterhouses, ranging from the smallest, custom butcheries to modern, automated establishments such as the sprawling IBP Inc. plant here where Moreno works.

"In plants all over the United States, this happens on a daily basis," said Lester Friedlander, a veterinarian and formerly chief government inspector at a Pennsylvania hamburger plant. "I've seen it happen. And I've talked to other veterinarians. They feel it's out of control."

The U.S. Department of Agriculture oversees the treatment of animals in meat plants, but enforcement of the law varies dramatically. While a few plants have been forced to halt production for a few hours because of alleged animal cruelty, such sanctions are rare.

For example, the government took no action against a Texas beef company that was cited 22 times in 1998 for violations that included chopping hooves off live cattle. In another case, agency supervisors failed to take action on multiple complaints of animal cruelty at a Florida beef plant and fired an animal health technician for reporting the problems to the Humane Society. The dismissal letter sent to the technician, Tim Walker, said his disclosure had "irreparably damaged" the agency's relations with the packing plant.

"I complained to everyone -- I said, 'Lookit, they're skinning live cows in there,'" Walker said. "Always it was the same answer: 'We know it's true. But there's nothing we can do about it.'"

In the past three years, a new meat inspection system that shifted responsibility to industry has made it harder to catch and report cruelty problems, some federal inspectors say. Under the new system, implemented in 1998, the agency no longer tracks the number of humane-slaughter violations its inspectors find each year.

Some inspectors are so frustrated they're asking outsiders for help: The inspectors' union last spring urged Washington state authorities to crack down on alleged animal abuse at the IBP plant in Pasco. In a statement, IBP said problems described by workers in its Washington state plant "do not accurately represent the way we operate our plants. We take the issue of proper livestock handling very seriously."

But the union complained that new government policies and faster production speeds at the plant had "significantly hampered our ability to ensure compliance." Several animal welfare groups joined in the petition.

"Privatization of meat inspection has meant a quiet death to the already meager enforcement of the Humane
"Slaughter Act," said Gail Eisnitz of the Humane Farming Association, a group that advocates better treatment of farm animals. "USDA isn't simply relinquishing its humane-slaughter oversight to the meat industry, but is -- without the knowledge and consent of Congress -- abandoning this function altogether."

The USDA's Food Safety Inspection Service, which is responsible for meat inspection, says it has not relaxed its oversight. In January, the agency ordered a review of 100 slaughterhouses. An FSIS memo reminded its 7,600 inspectors they had an "obligation to ensure compliance" with humane-handling laws.

The review comes as pressure grows on both industry and regulators to improve conditions for the 155 million cattle, hogs, horses and sheep slaughtered each year. McDonald's and Burger King have been subject to boycotts by animal rights groups protesting mistreatment of livestock.

As a result, two years ago McDonald's began requiring suppliers to abide by the American Meat Institute's Good Management Practices for Animal Handling and Stunning. The company also began conducting annual audits of meat plants. Last week, Burger King announced it would require suppliers to follow the meat institute's standards.

"Burger King Corp. takes the issues of food safety and animal welfare very seriously, and we expect our suppliers to comply," the company said in a statement.

Industry groups acknowledge that sloppy killing has tangible consequences for consumers as well as company profits. Fear and pain cause animals to produce hormones that damage meat and cost companies tens of millions of dollars a year in discarded product, according to industry estimates.

Industry officials say they also recognize an ethical imperative to treat animals with compassion. Science is blurring the distinction between the mental processes of humans and lower animals -- discovering, for example, that even the lowly rat may dream. Americans thus are becoming more sensitive to the suffering of food animals, even as they consume increasing numbers of them.

"Handling animals humanely," said American Meat Institute President J. Patrick Boyle, "is just the right thing to do.

Clearly, not all plants have gotten the message.

A Post computer analysis of government enforcement records found 527 violations of humane-handling regulations from 1996 to 1997, the last years for which complete records were available. The offenses range from overcrowded stockyards to incidents in which live animals were cut, skinned or scalded.

Through the Freedom of Information Act, the Post obtained enforcement documents from 28 plants that had high numbers of offenses or had drawn penalties for violating humane-handling laws. The Post also interviewed dozens of current and former federal meat inspectors and slaughterhouse workers. A reporter reviewed affidavits and secret video recordings made inside two plants.

Among the findings:

* One Texas plant, Supreme Beef Packers in Ladonia, had 22 violations in six months. During one inspection, federal officials found nine live cattle dangling from an overhead chain. But managers at the plant, which announced last fall it was ceasing operations, resisted USDA warnings, saying its practices were no different than others in the industry. "Other plants are not subject to such extensive scrutiny of their stunning activities," the plant complained in a 1997 letter to the USDA.

* Government inspectors halted production for a day at the Calhoun Packing Co. beef plant in Palestine, Tex., after inspectors saw cattle being improperly stunned. "They were still conscious and had good reflexes," B.V. Swamy, a
veterinarian and senior USDA official at the plant, wrote. The shift supervisor "allowed the cattle to be hung anyway." IBP, which owned the plant at the time, contested the findings but "took steps to resolve the situation," including installing video equipment and increasing training, a spokesman said. IBP has since sold the plant.

* At the Farmers Livestock Cooperative processing plant in Hawaii, inspectors documented 14 humane slaughter violations in as many months. Records from 1997 and 1998 describe hogs that were walking and squealing after being stunned as many as four times. In a memo to USDA, the company said it fired the stunner and increased its monitoring of the slaughter process.

* At an Excel Corp. beef plant in Fort Morgan, Colo., production was halted for a day in 1998 after workers allegedly cut off the leg of a live cow whose limbs had become wedged in a piece of machinery. In imposing the sanction, U.S. inspectors cited a string of violations in the previous two years, including the cutting and skinning of live cattle. The company, responding to one such charge, contended that it was normal for animals to blink and arch their backs after being stunned, and such "muscular reaction" can occur up to six hours after death. "None of these reactions indicate the animal is still alive," the company wrote to USDA.

* Hogs, unlike cattle, are dunked in tanks of hot water after they are stunned to soften the hides for skinning. As a result, a botched slaughter condemns some hogs to being scalded and drowned. Secret videotape from an Iowa pork plant shows hogs squealing and kicking as they are being lowered into the water.

USDA documents and interviews with inspectors and plant workers attributed many of the problems to poor training, faulty or poorly maintained equipment or excessive production speeds. Those problems were identified five years ago in an industry-wide audit by Temple Grandin, an assistant professor with Colorado State University's animal sciences department and one of the nation's leading experts on slaughter practices.

In the early 1990s, Grandin developed the first objective standards for treatment of animals in slaughterhouses, which were adopted by the American Meat Institute, the industry's largest trade group. Her initial, USDA-funded survey in 1996 was one of the first attempts to grade slaughter plants.

One finding was a high failure rate among beef plants that use stunning devices known as "captive-bolt" guns. Of the plants surveyed, only 36 percent earned a rating of "acceptable" or better, meaning cattle were knocked unconscious with a single blow at least 95 percent of the time.

Grandin now conducts annual surveys as a consultant for the American Meat Institute and the McDonald's Corp. She maintains that the past four years have brought dramatic improvements -- mostly because of pressure from McDonald's, which sends a team of meat industry auditors into dozens of plants each year to observe slaughter practices.

Based on the data collected by McDonald's auditors, the portion of beef plants scoring "acceptable" or better climbed to 90 percent in 1999. Some workers and inspectors are skeptical of the McDonald's numbers, and Grandin said the industry's performance dropped slightly last year after auditors stopped giving notice of some inspections.

Grandin said high production speeds can trigger problems when people and equipment are pushed beyond their capacity. From a typical kill rate of 50 cattle an hour in the early 1900s, production speeds rose dramatically in the 1980s. They now approach 400 per hour in the newest plants.

"It's like the 'I Love Lucy' episode in the chocolate factory," she said. "You can speed up a job and speed up a job, and after a while you get to a point where performance doesn't simply decline -- it crashes."

When that happens, it's not only animals that suffer. Industry trade groups acknowledge that improperly stunned animals contribute to worker injuries in an industry that already claims the nation's highest rate of job-related injuries and illnesses -- about 27 percent a year. At some plants, "dead" animals have inflicted so many broken
limbs and teeth that workers wear chest pads and hockey masks.

"The live cows cause a lot of injuries," said Martin Fuentes, an IBP worker whose arm was kicked and shattered by a dying cow. "The line is never stopped simply because an animal is alive."

At IBP's Pasco complex, the making of the American hamburger starts in a noisy, blood-spattered chamber shielded from view by a stainless steel wall. Here, live cattle emerge from a narrow chute to be dispatched in a process known as "knocking" or "stunning." On most days the chamber is manned by a pair of Mexican immigrants who speak little English and earn about $9 an hour for killing up to 2,050 head per shift.

The tool of choice is the captive-bolt gun, which fires a retractable metal rod into the steer's forehead. An effective stunning requires a precision shot, which workers must deliver hundreds of times daily to balky, frightened animals that frequently weigh 1,000 pounds or more. Within 12 seconds of entering the chamber, the fallen steer is shackled to a moving chain to be bled and butchered by other workers in a fast-moving production line.

The hitch, IBP workers say, is that some "stunned" cattle wake up.

"If you put a knife into the cow, it's going to make a noise: It says, 'Moo!'" said Ramon Moreno, the former second-legger, who began working in the stockyard last year. "They move the head and the eyes and the leg like the cow wants to walk."

After a blow to the head, an unconscious animal may kick or twitch by reflex. But a videotape, made secretly by IBP workers and reviewed by veterinarians for the Post, depicts cattle that clearly are alive and conscious after being stunned.

Some cattle, dangling by a leg from the plant's overhead chain, twist and arch their backs as though trying to right themselves. Close-ups show blinking reflexes, an unmistakable sign of a conscious brain, according to guidelines approved by the American Meat Institute.

The video, parts of which were aired by Seattle television station KING last spring, shows injured cattle being trampled. In one graphic scene, workers give a steer electric shocks by jamming a battery-powered prod into its mouth.

More than 20 workers signed affidavits alleging that the violations shown on tape are commonplace and that supervisors are aware of them. The sworn statements and videos were prepared with help from the Humane Farming Association. Some workers had taken part in a 1999 strike over what they said were excessive plant production speeds.

"I've seen thousands and thousands of cows go through the slaughter process alive," IBP veteran Fuentes, the worker who was injured while working on live cattle, said in an affidavit. "The cows can get seven minutes down the line and still be alive. I've been in the side-puller where they're still alive. All the hide is stripped out down the neck there."

IBP, the nation's top beef processor, denounced as an "appalling aberration" the problems captured on the tape. It suggested the events may have been staged by "activists trying to raise money and promote their agenda."

"Like many other people, we were very upset over the hidden camera video," the company said. "We do not in any way condone some of the livestock handling that was shown."

After the video surfaced, IBP increased worker training and installed cameras in the slaughter area. The company also questioned workers and offered a reward for information leading to identification of those responsible for the video. One worker said IBP pressured him to sign a statement denying that he had seen live cattle on the line.
"I knew that what I wrote wasn't true," said the worker, who did not want to be identified for fear of losing his job. "Cows still go alive every day. When cows go alive, it's because they don't give me time to kill them."

Independent assessments of the workers' claims have been inconclusive. Washington state officials launched a probe in May that included an unannounced plant inspection. The investigators say they were detained outside the facility for an hour while their identities were checked. They saw no acts of animal cruelty once permitted inside.

Grandin, the Colorado State professor, also inspected IBP's plant, at the company's request; that inspection was announced. Although she observed no live cattle being butchered, she concluded that the plant's older-style equipment was "overloaded." Grandin reviewed parts of the workers' videotape and said there was no mistaking what she saw.

"There were fully alive beef on that rail," Grandin said.

Preventing this kind of suffering is officially a top priority for the USDA's Food Safety Inspection Service. By law, a humane-slaughter violation is among a handful of offenses that can result in an immediate halt in production -- and cost a meatpacker hundreds or even thousands of dollars per idle minute.

In reality, many inspectors describe humane slaughter as a blind spot: Inspectors' regular duties rarely take them to the chambers where stunning occurs. Inconsistencies in enforcement, training and record-keeping hamper the agency's ability to identify problems.

The meat inspectors' union, in its petition last spring to Washington state's attorney general, contended that federal agents are "often prevented from carrying out" the mandate against animal cruelty. Among the obstacles inspectors face are "dramatic increases in production speeds, lack of support from supervisors in plants and district offices, new inspection policies which significantly reduce our enforcement authority, and little to no access to the areas of the plants where animals are killed," stated the petition by the National Joint Council of Food Inspection Locals.

Barbara Masters, the agency's director of slaughter operations, told meat industry executives in February she didn't know if the number of violations was up or down, though she believed most plants were complying with the law. "We encourage the district offices to monitor trends," she said. "The fact that we haven't heard anything suggests there are no trends."

But some inspectors see little evidence the agency is interested in hearing about problems. Under the new inspection system, the USDA stopped tracking the number of violations and dropped all mentions of humane slaughter from its list of rotating tasks for inspectors.

The agency says it expects its watchdogs to enforce the law anyway. Many inspectors still do, though some occasionally wonder if it's worth the trouble.

"It always ends up in argument: Instead of re-stunning the animal, you spend 20 minutes just talking about it," said Colorado meat inspector Gary Dahl, sharing his private views. "Yes, the animal will be dead in a few minutes anyway. But why not let him die with dignity?"