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So Long as They Die
Lethal Injections in the United States

Summary

We didn't discuss pain and suffering.

—William Henry Lloyd, Tennessee Department of Corrections lethal injection protocol committee member[1]

Compared to electrocution, lethal gas, or hanging, death by lethal injection appears painless and humane, perhaps because it mimics a medical procedure. More palatable to the general public, lethal injection has become the most prevalent form of execution in the United States. Thirty-seven of the thirty-eight death penalty states and the federal government have adopted it; for nineteen states, it is the only legal method of execution.

In the standard method of lethal injection used in the United States, the prisoner lies strapped to a gurney, a catheter with an intravenous line attached is inserted into his vein, and three drugs are injected into the line by executioners hidden behind a wall. The first drug is an anesthetic (sodium thiopental), followed by a paralytic agent (pancuronium bromide), and, finally, a drug that causes the heart to stop beating (potassium chloride).

Although supporters of lethal injection believe the prisoner dies painlessly, there is mounting evidence that prisoners may have experienced excruciating pain during their executions. This should not be surprising given that corrections agencies have not taken the steps necessary to ensure a painless execution. They use a sequence of drugs and a method of administration that were created with minimal expertise and little deliberation three decades ago, and that were then adopted unquestioningly by state officials with no medical or scientific background. Little has changed since then. As a result, prisoners in the United States are executed by means that the American Veterinary Medical Association regards as too cruel to use on dogs and cats.

Human Rights Watch opposes capital punishment in all circumstances. But until the thirty-eight death penalty states and the federal government abolish the death penalty, international human rights law requires them to use execution methods that will produce the least possible physical and mental suffering. It is not enough for public officials to believe that lethal injection is inherently more humane than the electric chair. States must choose carefully among possible drugs and administration procedures to be sure they

[1] Deposition, *Abdur'Rahman v. Sundquist*, et al., Case. No. 02-2236-III, April 4, 2003, p. 28.

have developed the specific protocol that will reduce, to the greatest extent possible, the prisoner's risk of mental or physical agony.

The history of lethal injection executions in the United States reveals no such care on the part of state legislators and corrections officials. The three-drug sequence was developed in 1977 by an Oklahoma medical examiner who had no expertise in pharmacology or anesthesia and who did no research to develop any expertise. Oklahoma's three-drug protocol was copied by Texas, which in 1982 was the first state to execute a man by lethal injection. Texas's sequence was subsequently copied by almost all other states that allow lethal injection executions. Drawing on its own research and that of others, Human Rights Watch has found no evidence that any state seriously investigated whether other drugs or administration methods would be "more humane" than the protocol it adopted.

Corrections agencies continue to display a remarkable lack of due diligence with regard to ascertaining the most "humane" way to kill their prisoners. Even when permitted by statute to consider other drug options, they have not revised their choice of lethal drugs, despite new developments in and knowledge about anesthesia and lethal chemical agents. They continue to use medically unsound procedures to administer the drugs. They have not adopted procedures to make sure the prisoner is in fact deeply unconscious from the anesthesia before the paralyzing second and painful third drugs are administered.

Each of the three drugs, in the massive dosages called for in the protocols, is sufficient by itself to cause the death of the prisoner. Within a minute after it enters the prisoner's veins, potassium chloride will cause cardiac arrest. Without proper anesthesia, however, the drug acts as a fire moving through the veins. Potassium chloride is so painful that the American Veterinary Medical Association prohibits its use for euthanasia unless a veterinarian establishes that the animal being killed has been placed by an anesthetic agent at a deep level of unconsciousness (a "surgical plane of anesthesia" marked by non-responsiveness to noxious stimuli).

Pancuronium bromide is a neuromuscular blocking agent that paralyzes voluntary muscles, including the lungs and diaphragm. It would eventually cause asphyxiation of the prisoner. The drug, however, does not affect consciousness or the experience of pain. If the prisoner is not sufficiently anesthetized before being injected with pancuronium bromide, he will feel himself suffocating but be unable to draw a breath—a torturous experience, as anyone knows who has been trapped underwater for even a few seconds. The pancuronium bromide will conceal any agony an insufficiently

anesthetized prisoner experiences because of the potassium chloride. Indeed, the only apparent purpose of the pancuronium bromide is to keep the prisoner still, saving the witnesses and execution team from observing convulsions or other body movements that might occur from the potassium chloride, and saving corrections officials from having to deal with the public relations and legal consequences of a visibly inhumane execution. At least thirty states have banned the use of neuromuscular blocking agents like pancuronium bromide in animal euthanasia because of the danger of undetected, and hence unrelieved, suffering.

Sodium thiopental is the only drug with anesthetic properties used in lethal injections. State protocols specify a dosage of sodium thiopental five to twenty times greater than what would be used in surgery. If this amount of sodium thiopental is administered properly, the prisoner will go limp, stop breathing, and lose consciousness within a minute. The prisoner will not feel the suffocating effects of pancuronium bromide or the agony of potassium chloride. If someone trained to establish and maintain intravenous lines, induce anesthesia, and monitor consciousness were present and involved in the lethal injection execution, the pain the prisoner would feel is the insertion of catheters into his veins. But lethal injection protocols do not include measures to ensure the anesthesia is quickly and effectively administered.

Administering drugs intravenously requires extensive training to ensure that the proper intravenous access is secured with minimal pain, and that it is then maintained. Inserting an intravenous catheter can be particularly difficult when the recipient has veins compromised by drug use—not uncommon among prisoners—and constricted by anxiety. Witnesses have described execution personnel poking repeatedly at prisoners trying to find a good vein.

Standard medical procedures for intravenous administration of anesthesia during surgery require that the equipment and the patient be monitored continuously by someone at the patient's side. Yet during lethal injection executions, the execution personnel are behind a wall and window, separated by many feet from the prisoner. Most significantly, standard medical procedures require a determination of the level of anesthesia before surgery begins and throughout the procedure. During lethal injection executions, the drugs are administered one after the other as quickly as the executioners can push the syringe plungers into the intravenous equipment. There is no person trained in the administration of anesthetics and the assessment of anesthetic depth present to ensure the prisoner is appropriately and continuously anesthetized before the second and third drugs are administered and throughout the execution; nor do execution team members use equipment that could determine the condemned inmate's level of consciousness.

Lawyers for condemned prisoners, medical and veterinary anesthesiologists, and others have suggested modifications to current lethal injection protocols that would minimize the risk of pain and suffering currently posed. They advise, for example, having a trained technician give the prisoner a single lethal injection of the painless barbiturate pentobarbital, a method that would eliminate the risks from using paralyzing or painful chemical agents. It is noteworthy that in Oregon, the only state that has legalized physician-assisted suicide, doctors prescribe an overdose of pentobarbital or a similar barbiturate for their terminally ill patients. When veterinarians euthanize animals, they also use a single massive dose of a barbiturate. Another alternative proposed by prisoners' lawyers and anesthesiologists is that officials who insist on using the three-drug sequence take steps to ensure the effectiveness of the anesthesia, e.g., by having present at the execution someone who is trained in anesthesiology and can assess the prisoner's level of consciousness before other drugs are injected and until the prisoner has died.

Because of our opposition to the death penalty, Human Rights Watch does not endorse any methods of lethal injection—either the current or proposed alternatives. We do insist, however, that states make a concerted effort to ensure they have chosen the method of executing their prisoners that meets the international human rights standard of risking the least possible pain and suffering of the inmate.

It is difficult to understand why corrections officials keep following protocols which were not sound when originally developed, and which advances in pharmacology and anesthesia administration have rendered archaic at best, torturous at worst. The only advantage of current protocols is that they yield executions that are relatively quick and appear painless—whatever the reality. As such, the current method is easier for witnesses to the execution as well as for the executioners. It also spares someone from having to be at the prisoner's side while he is being killed. An anesthesiologist who has served as an expert witness in litigation for corrections agencies has observed, "The people who are thinking about these things are not thinking about the inmate."

The risks of pain and suffering faced by prisoners from the current lethal injection protocol are not just hypothetical. There is mounting evidence, including execution records and eyewitness testimony, of botched executions. At least some prisoners may have been insufficiently anesthetized during their executions, experiencing pain but unable to signal their distress, because they were paralyzed. There have been executions where:

- For over an hour, medical technicians and then a physician tried to find a suitable vein for intravenous access. The condemned inmate ended up with one needle in his hand, one in his neck, and a catheter inserted into the vein near his collarbone. One hour and nine minutes after he was strapped to the gurney, the prisoner was pronounced dead.

- A kink in the intravenous tubing stopped some of the drugs from reaching an inmate. In the same execution, the intravenous needle was inserted pointing the wrong way—towards the inmate's fingers instead of his heart, which slowed the effect of the drugs.

- A prisoner who initially lost consciousness during his lethal injection execution began convulsing, opened his eyes, and appeared to be trying to catch his breath while his chest heaved up and down repeatedly. This lasted for approximately ten minutes before his body stopped twitching and thrashing on the gurney.

In six lethal injection executions in California, the condemned inmates' chests were moving up and down several minutes after the administration of the anesthetic, indicating that the inmates may not have been anesthetized deeply enough to avoid experiencing the painful effects of the potassium chloride and that the paralyzing effects of the pancuronium bromide might have prevented them from showing pain.

There have been at least forty-one cases before state and federal courts challenging the constitutionality of lethal injection protocols. No court has ever ruled lethal injection executions unconstitutional; many of the cases have been dismissed on procedural grounds without a full evidentiary hearing.

In two recent cases in California and North Carolina, federal courts have been sufficiently troubled by new evidence of possible problems with lethal injection executions that they ordered corrections officials to change their lethal injection procedures in particular ways, or the executions would be stayed. In both cases, the courts proposed the presence throughout the execution of someone trained in anesthesia. In the California case, the court also suggested the option of injecting the condemned prisoner, Michael Morales, with a single massive dose of a barbiturate. The California Department of Corrections rejected the use of a single barbiturate and was not able to find anesthesiologists willing to monitor the prisoner's level of anesthesia and to make adjustments as necessary for the three-drug protocol execution. The court stayed the prisoner's execution and scheduled an evidentiary hearing on California's

lethal injection protocols for May 2 to 3, 2006. As of April 10, 2006, North Carolina has not responded to the court order in its case. On April 26, the U.S. Supreme Court will hear oral arguments about the procedures a prisoner must use to challenge the constitutionality of a lethal injection protocol.

California's inability to find anesthesiologists to participate in the execution of Morales highlights the limits medical ethics place on the participation of medical professionals in executions. Indeed, it was the growing practice of lethal injection executions that prompted the medical community to clarify and solidify its position that physician participation in executions violates the ethical precepts of the profession. The American Medical Association (AMA) defines the prohibited participation to include monitoring vital signs; attending or observing as a physician; rendering technical advice regarding executions, selecting injection sites; starting intravenous lines; prescribing, preparing, administering, or supervising the injection of drugs; inspecting or testing lethal injection devices; and consulting with or supervising lethal injection personnel. Heeding these guidelines, even doctors who work for corrections agencies have refused to participate in the development of lethal injection protocols or their use. Nevertheless, despite the AMA's clear stance, some physicians ignore the ethical guidelines and offer their help during lethal injection executions.

Human Rights Watch recognizes that medical ethics restricts the way states can conduct lethal injection executions. This is a dilemma of the states' making—by their refusal to abolish capital punishment—and it is a dilemma states must resolve while heeding their human rights responsibilities, if they continue to use lethal injection executions.

Until recently, the United States was the only country in the world that used lethal injection as an execution method. Several other countries that have not yet abolished the death penalty have followed: China started using lethal injection in 1997; Guatemala executed its first prisoner by lethal injection in 1998; and the Philippines and Thailand have had lethal injection execution laws in place since 2001 (although to date, they have not executed anyone by this method).

Recommendations

Human rights law is predicated on recognition of the inherent dignity and the equal and inalienable rights of all people, including even those who have committed terrible crimes. It prohibits torture and other cruel, inhuman or degrading punishment. Human Rights Watch believes these rights cannot be reconciled with the death penalty, a form of punishment unique in its cruelty and finality, and a punishment inevitably and universally plagued with arbitrariness, prejudice, and error. Thus our first recommendation is that states and the federal government abolish the death penalty. If governments do not choose to abolish capital punishment, they must still heed human rights principles by ensuring their execution methods are chosen and administered to minimize the risk a condemned prisoner will experience pain and suffering. As state lethal injection protocols have never been subjected to serious medical and scientific scrutiny, Human Rights Watch recommends that each state suspends its lethal injection executions until it has convened a panel of anesthesiologists, pharmacologists, doctors, corrections officials, prosecutors, defense attorneys, and judges to determine whether or not its lethal injection executions as currently practiced are indeed the most humane form of execution.

To State and Federal Corrections Agencies

- Review lethal injection protocols by soliciting input from medical and scientific experts, and by holding public hearings and seeking public comment.
- Stop using drugs that do not minimize the pain and suffering of the condemned inmate. Ensuring the comfort of witnesses and the executioners should not be a determining factor in which drugs are chosen for lethal injections. More specifically, discontinue the use of pancuronium bromide or any other neuromuscular blocking agent, because it masks any pain and suffering endured by the inmate. Replace potassium chloride with drugs that do not cause excruciating pain.
- Anesthesia must be used in all lethal injections that involve painful or paralyzing drugs. If anesthesia is used, ensure that trained personnel are present and able to monitor the prisoner's consciousness to ensure he is deeply and fully anesthetized before any subsequent painful drugs are administered. Such personnel would stand beside the prisoner throughout the execution.
- Keep, retain, and make publicly available execution records, including execution logs, autopsy reports, and toxicology reports.
- Conduct periodic reviews of lethal injection protocols to ensure they reflect medical and pharmacological developments.

To State Legislators and the U.S. Congress

- Abolish the death penalty.
- If the death penalty is not abolished, suspend all lethal injection executions until each state convenes a blue ribbon panel of medical, scientific, legal, judicial, and correctional experts authorized to review and recommend changes to lethal injection execution protocols as necessary to ensure the protocol adopted causes the inmate the least possible pain and suffering.
- Require corrections departments to adopt the method of execution, including the specific method of lethal injection, that causes the inmate the least possible pain and suffering.