
History of Lethal Injection Protocol

“There is scant evidence that ensuing States’ adoption of lethal injection was supported by any additional medical or scientific studies that the adopted form of lethal injection was an acceptable alternative to other methods. Rather, it is this Court’s impression that the various States simply fell in line relying solely on Oklahoma’s protocol . . . in drafting and approving a lethal injection protocol. Kentucky is no different.”

Brief for Petitioners, *Baze v. Rees*, quoting Joint Appendix, at 755-56.

Lethal injection creator: Maybe it's time to change formula

- Lethal injection, created in late 1970s in Oklahoma, has been widely adopted
- Doctor who devised the method says drug formula may need updating
- Newer drugs might be more effective, doctor says

By Elizabeth Cohen
CNN

ATLANTA, Georgia (CNN) -- When Gary Gilmore was choosing between the firing squad and the electric chair in 1977, Dr. Jay Chapman remembers discussing the inhumanity of each option with his colleagues at the Oklahoma state medical examiner's office.

"We said this is really ridiculous. We kill animals more humanely than we kill people," said Chapman.

But Chapman, then the chief medical examiner in Oklahoma, supported the death penalty. So when state legislators asked him to come up with a more humane alternative, he went to work.

For three weeks Dr. Chapman contemplated the best way to kill someone, the best combination of drugs that when injected, would take life swiftly and painlessly.

He came up with a lethal three-drug cocktail, and to his great surprise, over the past 25 years, 37 states adopted it nearly to the letter. But now, after concerns that instead of causing an instant death it sometimes provides a slow, painful, one, Chapman has rethought whether his formula is optimal.

"It may be time to change it," Chapman said in a recent interview. "There are many problems that can arise ... given the concerns people are raising with the protocol it should be re-examined."

A recent study found sometimes inmates given lethal injections slowly suffocate while conscious but unable to communicate. Judges have ruled the procedure unconstitutional in two states, and 11 states have stopped using lethal injection.

One problem was illustrated last year when it took nearly 90 minutes to execute Joseph Clark, who'd murdered two people in Ohio. Witnesses reported that Clark raised his head off the gurney and said repeatedly, "don't work, don't work," and moaned and groaned as he struggled with prison officials.

News accounts of the execution also quoted Clark as asking, "Can you just give me something by mouth to end this?"

Chapman's protocol involves using an anesthetic to render the inmate unconscious; a paralytic to stop the inmate's breathing; and a drug to stop the heart.

One criticism has been that the anesthetic, sodium thiopental, doesn't completely anesthetize all inmates.

"Now there are other agents that work much faster and much easier," Chapman said, specifically pointing out an anesthetic called Diprivan. "Absolutely [Diprivan] would be better [for an execution]. If you're wanting to give someone something so there's no sensation, no awareness of what's going on, that's the drug."

The other major criticism of the lethal injection method has been that if the prisoner isn't completely unconscious, he will feel the asphyxiation caused by the second drug, pancuronium bromide, which paralyzes all muscles, including those needed to breathe.

When asked why he included the asphyxiation drug in his formula, Chapman answered, "It's a good question. If I were doing it now, I would probably eliminate it."

He added he wouldn't change the third drug, potassium chloride, which is highly effective at stopping the heart and causing cardiac arrest.

Chapman still stands by his formula as a sound -- if not perfect -- method of execution. "It works if it's administered competently," he said. "But you have to have some skills to do it. You have to have the ability to find a vein and mix the drugs, because [some of them] come as a powder."

He added that he's heard reports that in one execution, the IV needle was inserted incorrectly, pointing toward the prisoner's hand rather than his body. "You have to be an idiot to do that," said Chapman, who's a forensic pathologist.

He also criticized prison officials for inserting the IV inside the death chamber rather than beforehand. "It seems ridiculous to me to be trying to find a vein when everyone's inside the chamber, feeling nervous and fiddling around trying to find the vein," he said. "That's just ludicrous to me."

He also cited another "incompetency:" the execution of Angel Nieves Diaz last year that took 34 minutes because IV needles were inserted straight through his veins and into the flesh in his arms. Then-Florida Gov. Jeb Bush subsequently suspended all executions.

Even proponents of the death penalty say they have doubts about whether the three-drug formula is the best way to execute someone. "I think it's a dumb way to do it," said Michael Rushford, president of the Criminal Justice Legal Foundation, a group that advocates the death penalty. "It's a complicated procedure, and open to criticism."


Instead, Rushford said he supports using carbon monoxide, which he described as being "simple, fast, and painless."

Chapman disagreed with that assessment. But he had another idea. "The simplest thing I know of is the guillotine. And I'm not at all opposed to bringing it back. The person's head is cut off and that's the end of it."

Elizabeth Cohen is a CNN Medical News correspondent. Senior producer Jennifer Pifer and associate producer Sabriya Rice contributed to this report.

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Informal talks opened door to lethal injection

By Robbie Byrd

News Editor

Editor's Note: This story is the first in a series examining the death penalty from both opponents of and those in favor of lethal injection.

It was a long time ago, said Dr. Gerry Etheredge, when he was speaking with Dr. Ralph Gray about lethal doses of drugs.

The thing that had brought these two men together — Etheredge, a veterinarian by trade, and Gray, then the Medical Director of the Texas Department of Corrections — was lethal injection, a process that Gray, along with the Texas Department of Criminal Justice, would spearhead.

“When they first started talking about lethal injection, I discussed with him the use of that drug,” Etheredge said.

That drug was Pavulon, more commonly known under its generic name of pancuronium bromide, a drug that is now at the forefront of what seems to be a nationwide halt to lethal injection in the U.S., as all ears wait for a decision from the Supreme Court.

That conversation over this simple drug may have shaped the current method of lethal injection in the state, but it wasn't the first in what one Supreme Court justice called a “machinery of death,” and an “experiment (that) has failed.”

An experiment in death

While Texas was the first to use the brand-new lethal injection protocol in 1982, it got its start some five years earlier in nearby Oklahoma.

Bill Wiseman, a Republican state representative from Tulsa, was in the capitol building the day the Oklahoma House of Representatives voted to re-instate the death penalty after a lengthy halt in the U.S.

Looking for a more humane way to execute the condemned — at the time, hanging, firing squad, the gas chamber and the electric chair were the only methods available — Wiseman called out to the Oklahoma Medical Association for help.

But no one from the medical field would help, citing their oath to save lives, not take them.

"I muttered to colleagues that it looked as if I would need to find a veterinarian to tell me how to 'put down' condemned prisoners," Wiseman told the Christian Century magazine in 2001.

But he did find help in Jay Chapman, Oklahoma's medical examiner, who offered a rough outline of the lethal injection procedure used today.

According to records, Oklahoma passed the bill, drafted by Wiseman and Chapman, on May 10, 1997. Texas passed a similar bill the next day.

The bill didn't specify the type of drugs to be used, other than to roughly specify the mechanics of them, leaving the actual policy of the drugs and amounts used up to the then Texas Department of Corrections.

It was now that Gray entered the picture, and his conversation with Etheredge would be paramount.

Of mice and men

When told of the drugs Gray intended to use, Gray suggested an alternative: a method that Etheredge already knew worked.

Phenobarbital sodium, a drug commonly used in the euthanization of animals, was considered as the one and only drug to be used in lethal injections.

But Gray said the drug wouldn't stand up in the court of public opinion.

"Dr. Gray's feelings on it were they would start equating lethal injection with killing dogs and that there would be public outcry against it and they had to come up with something different," Etheredge said. "At least that's what Dr. Gray said, and that sounds good to me."

So Gray developed the current protocol, and it quickly was copied by 36 other states.

Seen as a more humane way to execute the condemned versus the alternatives, it quickly became the preferred — and increasingly more common — protocol used in the nation.

When used in the euthanization of animals, Etheredge claims the drug is very effective and causes no pain to the animals.

"This works too well (to use anything else)," Etheredge said. "It's too smooth, it's too

safe and you only have to give one drug. It's painless."

On the flip side, Etheredge quotes doctors who say the current procedure is painless and poses no real risk of unnecessary pain.

"Both anesthesiologists who are in favor of lethal injection and those who are opposed to lethal injection — except for the activists — have said the cocktail that is given is safe and painless," Etheredge said. "At least from the standpoint that you're not going to cause the individual taking the drugs any undue stress."

"Well, obviously that's a stressful situation to begin with."

Etheredge said that, even so, he suggested the method to Gray because he believed it to be the preferred method.

Then why wasn't it adopted?

"It's a political thing," Etheredge said.

Copy and paste

In 2002, a delegation from the state of Alabama took a visit to Texas. But this visit was all business.

The delegation — including Grant Culliver, the then-warden of the Hollman Correctional Facility, home to the state's death row and execution chamber — visited the Huntsville "Walls" Unit and witnessed an execution at the facility.

"We visited Texas and witnessed an execution there," Culliver said in a 2002 interview with The Atmore Advance. "It was very professional and handled well. Everything went according to plan."

The process, Culliver said, was heavily copied from Texas' own, after the Legislature in Alabama passed a law requiring the state to partially retire the electric chair, known affectionately as "Yellow Mama" because of its bright yellow appearance, and switch to lethal injection as its primary means of execution.

Other states took the lead from Texas, even though Oklahoma pioneered the idea of lethal injection, after a track record of uneventful executions.

According to a report from the Human Rights Watch, an anti-death penalty group, a legal case over Louisiana's copying of Texas' method brought a flurry of controversy over how the process was developed.

A Louisiana prison pharmacy director, Donald Courts, according to the group had the

following conversation with a Texas prison official about the executions.

“We were getting ready to hang up the phone, and I said, ‘I have but just one question I need to ask you,’ Courts said. “Every other state I have spoken to is using 2 grams of sodium pentothal. Why are y’all using five?’ And he started laughing and said, ‘Well, you see, when we did our very first execution, the only thing I had on hand was a 5-gram vial. And rather than do the paperwork on wasting 3 grams, we just gave all five.’”

Wait and see

A case before the Supreme Court now has massive implications for the future of lethal injection in the nation, opponents and proponents of the procedure say.

But its scope is narrow, only focusing on the drugs used in the current protocol of all but one state that uses the method.

The court is not expected to rule on the case until sometime next year, and its consequences could change the process of execution throughout the nation.

Dennis Longmire, an outspoken critic of the death penalty and professor of criminal justice at Sam Houston State University, said the case brings a time of pause that could be used to examine other methods of execution.

“I’m not an executioner or expert on it, but it’s worth noting that in any technique we use that requires an injection-based process we have to rely on some sort of chemical we have the problem of maintaining reliability,” Longmire said. “I hope if anything comes out of the Baze case there is a requirement that states provide some sort of monitoring through the process to ensure if something is going wrong they can do something to intervene or stop the problem.”

But proponents of the process say there is nothing wrong with the way things are.

Walker County Criminal District Attorney David Weeks said he believes the process to be humane.

“I have been to an execution,” Weeks said. “It was a case I tried and I went to be with the victims family. It went very smoothly. They have a plan and procedure they follow very closely.”

Even so, Weeks — who has prosecuted several capitol murder cases — believes the decision on how to implement the procedure is in good hands with the courts and the state Legislature.

“How they execute them, that’s really for the legislators and others to decide,” Weeks said. “I don’t really have an opinion one way or the other.”

No. 07-5439

IN THE
Supreme Court of the United States

RALPH BAZE, *et al.*,

Petitioners,

v.

JOHN D. REES, *et al.*,

Respondents.

**On Writ of Certiorari to the
Supreme Court of Kentucky**

**BRIEF FOR THE FORDHAM UNIVERSITY
SCHOOL OF LAW, LOUIS STEIN CENTER
FOR LAW AND ETHICS AS *AMICUS CURIAE*
IN SUPPORT OF PETITIONERS**

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INTEREST OF *AMICUS CURIAE*¹

The Louis Stein Center for Law and Ethics is based at Fordham University School of Law. The Stein Center reflects the law school's commitment to teaching, legal scholarship, and professional service that promote the role of ethical perspectives in legal practice, legal institutions, and the historical and contemporary development of the law itself. For more than a decade, the Stein Center and affiliated Fordham Law faculty have examined the ethical and historical dimensions of the administration of the criminal justice system, particularly that of the death penalty. In this capacity, the Stein Center submitted an amicus brief to this Court in the case of *Bryan v. Moore*, 528 U.S. 960 (1999), *cert. dismissed as improvidently granted*, 528 U.S. 1133 (2000), which the Court had granted to consider whether electrocution violated the Eighth Amendment's Cruel and Unusual Punishments Clause.

The use of lethal injection as a method of execution raises a host of ethical questions important to the Stein Center that are enlightened by a review of the history of execution methods generally and lethal injection in particular. On the

¹ Pursuant to Rule 37.3, the parties have consented to the filing of this brief. Letters of consent have been filed with the Clerk. No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amicus curiae*, its members, or its counsel made a monetary contribution to its preparation or submission.

one hand, the history suggests, not surprisingly, a public consensus opposed to the infliction of severe pain in the course of executing individuals who were sentenced to death. On the other hand, the history raises doubts whether legal institutions, including state legislators, prison officials, and courts, have responded ethically to the serious and unnecessary risks associated with current lethal injection procedures.

INTRODUCTION AND SUMMARY OF ARGUMENT

This amicus brief's purpose is not to repeat the Petitioners' doctrinal argument that Kentucky's implementation of lethal injection violates the Eighth Amendment. Rather, the purpose of this brief is to set forth three historical propositions that are relevant to the Court's analysis of that issue.

(1) The history of execution methods in the United States demonstrates an evolving moral and legal consensus toward seeking out methods of execution that are humane and free from unnecessary pain. States have sought to introduce more humane methods of execution when the actual implementations of particular methods—e.g., hangings that failed to bring about death or caused decapitations, electrocutions that produced burning flesh, and slow asphyxiation in the gas chamber—were scrutinized and shown to be barbaric or open to a high risk of unnecessary error and pain relative to other available options.

(2) At one level, the current legislative trend towards the use of lethal injection was propelled by a search for a more humane alternative to the cruelty of existing execution methods. The historical evidence demonstrates, however, that lethal injection *as actually practiced* is not the result of informed deliberation or reasoned consensus. The three-drug lethal injection protocol first was developed in Oklahoma in 1977 without study or qualified scientific or medical input. Soon thereafter, state after state blindly followed Oklahoma's lead. Moreover, the responsibility for the essential details of implementing lethal injection—what drugs should be used, what dosage amount, who should administer the drugs and how—was delegated by state legislatures to uninformed prison personnel. Hidden from public scrutiny and oversight, state prison personnel were often guided by unqualified sources. Thus states—including Kentucky—developed and adopted the nearly ubiquitous three-drug lethal injection protocol and procedures quickly, haphazardly, and without relevant medical or scientific input.

(3) Several features of the history of lethal injection have led to the *continued* repression of genuine scrutiny of the procedure and its implementation. Historical and structural factors have largely shielded lethal injection from the kind of public scrutiny that has led states in the past to reform execution methods. Thus, while the prevalence of both the three-drug protocol and its flawed implementation might at first glance suggest

societal acceptance of the unnecessary risks that exist today, history exposes that premise as a fallacy. Although there is a consensus that the states should strive to make executions free from unnecessary pain and suffering, there is no reasoned consensus that current lethal injection procedures meet this goal. In this context, judicial scrutiny must ensure that states' administration of lethal injection eliminates the significant and unnecessary risk of serious pain.

ARGUMENT

I. THE HISTORY OF EXECUTION METHODS IN THE UNITED STATES DEMONSTRATES A SOCIETAL CONSENSUS IN FAVOR OF SEEKING OUT METHODS OF EXECUTION THAT ARE FREE OF SEVERE AND UNNECESSARY PAIN AND SUFFERING.

Lethal injection is the newest execution method in the United States. Its use began only in the last quarter of the twentieth century, after its creation by the State of Oklahoma in 1977. To fully understand the history of lethal injection in the United States, the development of the method must be viewed within a larger pattern that persisted throughout the twentieth century and continues to this day. As this Part demonstrates, states generally have sought to introduce more humane methods of execution once the actual implementations of pre-existing methods were scrutinized and shown to be too barbaric, flawed, or open to a high risk of painful or gruesome error relative to other available options. *See*

generally Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Uses of Electrocution and Lethal Injection and What It Says About Us*, 63 OHIO ST. L.J. 63 (2002); STUART BANNER, *THE DEATH PENALTY: AN AMERICAN HISTORY* (2002).

As the last century and a half of American history shows, the introduction of each *seemingly* more humane execution method typically is followed by scrutiny of the new procedure's actual operation, and then by a growing societal awareness that the new method is not as humane as previously thought. This basic pattern can be seen in the historical trend in the United States from hanging, to electrocution, to the gas chamber, to lethal injection—the currently dominant method of execution.²

² This Part does not discuss the firing squad because it was never widely adopted in the United States. No state currently relies on the firing squad and only Idaho, Utah, and Oklahoma still authorize the firing squad as an alternative to lethal injection under some limited circumstances. See Tracy L. Snell, Bureau of Justice Statistics, Bureau of Justice Statistics Bull. No. NCJ 215083, *Capital Punishment 2005*, 4 tbl. 2 (2006), available at <http://www.ojp.usdoj.gov/bjs/pub/pdf/cp05.pdf>. The method, which may have gained limited popularity in those states because it was based on an early Mormon belief in “blood atonement,” see Deborah W. Denno, *Getting to Death: Are Executions Constitutional?*, 82 IOWA L. REV. 319, 395 (1997), never gained broader traction, likely because of the barbaric images associated with it. See generally Christopher Q. Cutler, *Nothing Less Than the Dignity of Man: Evolving Standards, Botched Executions and Utah's Controversial Use of the Firing Squad*, 50 CLEV. ST. L. REV. 335 (2003). There has not been an

1. Hanging, a method of execution used since antiquity, was by the year 1853 “the nearly universal form of execution in the United States.” *Campbell v. Wood*, 511 U.S. 1119 (1994) (Blackmun, J., dissenting from denial of *certiorari*). At that time, forty-eight states and territories imposed death via hanging. *Id.* By the late 1800s, however, a series of gruesomely botched public hangings—involving decapitations or slow strangulations—attended by thousands of spectators,³ served as an impetus for a re-examination of hanging and a quest for “whether the science of the present day” could find a “less barbarous manner” of bringing about death. *In re Kemmler*, 136 U.S. 436, 444 (1890) (citation omitted). This quest led some states to turn their sights from the hangman’s noose to the electric chair. *See, e.g., Malloy v. South Carolina*, 237 U.S. 180, 185 (1915) (noting that, at the time, twelve states had altered their method based on concerns of humaneness).

Other states maintained hanging, but sought to apply emerging insights of science and medicine to make hanging less painful, less prone to error, and more humane. Washington State, for example, retained hanging after nearly every other state had switched to the electric chair. When the

execution by firing squad in the United States in over a decade. Press Release, U.S. Dep’t of Justice, Prisoner Executions Rise Significantly (Dec. 14, 1997), *available at* <http://www.ojp.gov/bjs/pub/press/cp96.pr>.

³ BANNER, *supra*, at 172-75 (describing “[b]ungled hangings [that] often caused intense pain and on occasion failed to kill”).

constitutionality of Washington's procedure was later challenged, the United States Court of Appeals for the Ninth Circuit concluded that, despite the fact that a majority of states had abandoned hanging, Washington's use of the method was not cruel and unusual punishment because the state's hanging protocol, Field Instructions WSP 410.500, took multiple steps based on scientific study and the input of experts to minimize the risk of inhumane hanging deaths. *See Campbell v. Wood*, 18 F.3d 662, 684-685 (9th Cir. 1994) (en banc). Nevertheless, two years later, as a result of greater public awareness and deliberation as to the continuing risk of unnecessary pain and brutality of hanging, Washington State changed its default execution method from hanging to lethal injection.⁴ Denno, 63 OHIO ST. L.J. at app. 2, at 205-206. States have now abandoned hanging.⁵

2. Most states moved more quickly than Washington to find a more humane method of execution than hanging. By the beginning of the twentieth century, the vast majority of states abandoned hanging for the electric chair. When the electric chair was first introduced in New York in 1888, prior to scrutiny of actual electrocutions, it was widely held up as a modern, technologically

⁴ Wash. Rev. Code Ann. § 10.95.180 (West 2007) (requiring lethal injection unless the inmate elects hanging).

⁵ Only three inmates have been hanged since 1977 and no state uses hanging as its sole method. *See Snell, supra*, at 4 tbl. 2, app. at 17 tbl. 5.

advanced method of execution that employed science to ensure as quick and painless a death as possible. See REPORT OF THE COMMISSION TO INVESTIGATE AND REPORT THE MOST HUMANE AND PRACTICAL METHOD OF CARRYING INTO EFFECT THE SENTENCE OF DEATH IN CAPITAL CASES, at 80 (1888) [hereinafter NY COMM'N REPORT]. Before the first use of the electric chair, the NEW YORK TIMES deemed electrocution “euthanasia by electricity” in advocating its use over the “barbarity” of hanging. *Capital Punishment*, N.Y. TIMES, Dec. 17, 1887, at 4.⁶ Even Thomas Edison testified at the time that electrocution would bring about “instantaneous” death. See *In re Kemmler*, 7 N.Y.S. 145 (Cayuga County Ct. 1889) (Trial Transcript at 636).

In the absence of any actual electrocutions to gauge the implementation of the method, this Court, in a case that preceded the application of the Eighth Amendment to the States, permitted the first execution by electric chair to proceed in 1890, recognizing New York’s expressed motivation of finding a more humane method of execution. *In re Kemmler*, 136 U.S. at 447. After *Kemmler*, other states adopted the electric chair as a perceived humane alternative to hanging and other primitive methods of execution. Indeed, by the 1920s,

⁶ Similarly, when Texas, the most active capital state, abandoned hanging for electrocution in 1923, the “Texas legislators hoped to demonstrate that their state was in greater concord with evolving standards of decency.” JAMES W. MARQUART ET AL., *THE ROPE, THE CHAIR, AND THE NEEDLE: CAPITAL PUNISHMENT IN TEXAS, 1923-1990* at 18 (1994).

motivated by a growing national desire to develop a more humane execution method, more than half of the active death penalty states employed the electric chair. See RAYMOND PATERNOSTER, CAPITAL PUNISHMENT IN AMERICA 23 (1991).

Despite the fact that electrocution had replaced hanging throughout the country due to a stated desire to execute capital defendants in a more humane way, the public eventually learned that the reality of the electric chair did not meet this worthy goal. BANNER, *supra*, at 192-193. Widely reported accounts of gruesomely botched electrocutions led to broad public concern as to whether the electric chair, which in “grotesque” examples caused sparks and flames to emanate from the body, required multiple jolts over time to bring about death, or caused blood to spray from the nose or mouth, was the humane method of execution that originally it was thought to be.⁷ Public scrutiny of electrocutions also intensified in light of this Court’s decision in *Gregg v. Georgia*, 428 U.S. 153 (1976), which ended the nine-year execution hiatus that had begun in the period leading up to *Furman v. Georgia*, 408 U.S. 238 (1972).

With scrutiny came legislative change. The year 1949 was the last in which a state legislature switched to electrocution from another form of execution. Denno, 63 OHIO ST. L.J. at app. 2, at 206 tbl. 2. States once again began seeking out a new

⁷ See Denno, 82 IOWA L. REV. at app. 2.A at 413 (describing examples of botches).

method of execution that offered a more humane death to the condemned compared to the violence and pain of the electric chair. As discussed below, some states initially experimented with lethal gas while others moved to lethal injection.

Not only did legislatures reexamine electrocution, but courts also scrutinized the method's constitutionality. In 1999, this Court granted *certiorari* in a case challenging the constitutionality of the electric chair in Florida. *Bryan v. Moore*, 528 U.S. 960 (1999). Before the Court decided the case, however, as a result of public awareness of seriously botched electrocutions,⁸ Florida altered its execution method so that an inmate could choose between electrocution and lethal injection. With this legislative change, the Court dismissed the writ as improvidently granted. 528 U.S. 1133 (2000). Electrocutions are now exceedingly rare. Only one state, Nebraska, currently relies solely on electrocution. Neb. Rev. Stat. § 29-2532 (2006).⁹

⁸ See Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled The Death Penalty*, 76 FORDHAM L. REV. 49, 63 (2007) (describing the 1999 botched execution of Allen Lee Davis, whose brutal electrocution scars were witnessed by millions of people who viewed post-execution color photographs on the Florida Supreme Court's website).

⁹ Seven states allow for a choice between electrocution and some other method, with some states limiting the choice to inmates sentenced before a certain date and other states allowing any inmate to choose between the methods. See Snell, *supra*, at 4 tbl. 2. One state permits electrocution only if lethal injection is held unconstitutional. See *id.* Although

3. As gruesome hangings and botched electrocutions brought increasing scrutiny to those execution methods, some states experimented, at least initially, with the gas chamber, believing that it offered a more humane method of death than other available alternatives. In 1921, Nevada, which had never adopted the electric chair, became the first state to authorize lethal gas. Denno, 63 OHIO ST. L.J. at 83. The state legislature made this switch because it “sought to provide a method of inflicting the death penalty in the most humane manner known to modern science.” *State v. Gee Jon*, 211 P. 676, 682 (Nev. 1923). By 1955, ten additional states had adopted lethal gas, similarly out of humanitarian concern. Denno, 63 OHIO ST. L.J. at 83.

It was expected that lethal gas executions in Nevada would resemble relatively peaceful methods of killing animals using lethal gas. *See Gee Jon*, 211 P. at 681. But, as with previous execution methods, the reality of lethal gas hardly provided the sought-after humaneness. Eventually, the public learned that inmates did not die peacefully by breathing in lethal gas while sleeping. The gas chamber did not induce immediate unconsciousness and death, and inmates often urinated on themselves, moaned,

electrocutions have become rare, as a result of growing awareness of the risk of severe pain from lethal injection, some inmates have recently chosen the electric chair. *See, e.g.,* Frank Green & Jamie C. Ruff, *Killer Executed for Mother’s Day Slaying*, RICHMOND TIMES-DISPATCH (VA.), July 21, 2006, at A1.

twitched, and painfully convulsed for minutes before finally dying.¹⁰ In addition, the gas chamber carried with it an enduring association to the abhorrent mass killings in Nazi Germany. Allen Huang, *Hanging, Cyanide Gas, and the Evolving Standards of Decency: The Ninth Circuit's Misapplication of the Cruel and Unusual Clause of the Eighth Amendment*, 74 OR. L. REV. 995, 1007-08 (1995).¹¹ In light of waning public support, lethal gas has all but disappeared. There have been only eleven lethal gas executions since 1977¹² and no state currently retains it as a sole method.¹³

¹⁰ See, e.g., *Gray v. Lucas*, 710 F.2d 1048, 1058-59 (5th Cir. 1983); see also Denno, 82 IOWA L. REV. at app. 2.B at 425.

¹¹ “To this day, the term ‘gas chamber’ continues to conjure images of the Nazi Party’s use of lethal gas to kill millions of people during World War II. Although the Nazis used Zyklon-B rather than cyanide, the administration and procedure is virtually the same” Huang, *supra*, at 1008 n.125.

¹² See Snell, *supra*, app. at 17 tbl. 5.

¹³ Three states allow for a choice between lethal gas and lethal injection, one state allows an inmate to chose lethal gas only if sentenced to death before a certain date, and one state provides for lethal gas if lethal injection is held unconstitutional. See Snell, *supra*, at 4 tbl. 2.

II. HISTORICAL EVIDENCE DEMONSTRATES THAT THE LETHAL INJECTION METHOD THAT KENTUCKY WILL USE TO EXECUTE PETITIONERS DOES NOT RESULT FROM SCIENTIFIC OR MEDICAL STUDY OR REASONED CONSIDERATION OF HOW TO IMPLEMENT THE METHOD WITHOUT SEVERE AND UNNECESSARY PAIN AND SUFFERING.

The historical framework just described provides the context for considering the three-drug lethal injection protocol used by most death penalty states, including Kentucky. Lethal injection is, at this historical moment, the prevalent method of execution in the United States. Thirty-eight states currently authorize the death penalty. Twenty-eight of those states require execution by lethal injection. *See Denno*, 76 *FORDHAM L. REV.* at 59 n.50 (providing comprehensive listing of state statutory provisions).¹⁴ Nine of the thirty-eight death penalty states allow an inmate to choose between lethal injection and another method of execution—either electrocution, lethal gas, hanging, or the firing

¹⁴ Included among the twenty-eight states are those—like Kentucky—which specify that an inmate has a choice between lethal injection and another method only if he was sentenced to death before a certain date, as well as states that specify another method only if lethal injection is held unconstitutional. For detailed accountings of the statutory variations, see *Denno*, 63 *OHIO ST. L.J.* at app. 2 at 188-206; *Snell, supra*, at 4 tbl. 2.

squad.¹⁵ *Id.* The remaining death penalty state, Nebraska, uses only electrocution.¹⁶

Of the thirty-seven states that use lethal injection, nearly every one employs a similar three-drug protocol: (1) a short-acting anesthetic, typically sodium thiopental, (2) a muscle paralyzer, usually pancuronium bromide,¹⁷ and (3) potassium chloride, an excruciatingly painful drug that causes death by stopping the heart. Denno, 76 *FORDHAM L. REV.* at 96 n.318 (listing available state-by-state information on protocols).¹⁸

¹⁵ Not included among the nine “choice” states are those that allow an inmate to choose an alternative method only if sentenced to death prior to a certain date or that specify another method only if lethal injection is held unconstitutional. *See supra* n.14.

¹⁶ *See* Neb. Rev. Stat. § 29-2532 (2006). The state has conducted three electrocutions since 1977. *See* Snell, *supra*, app. at 17. However, the Supreme Court of Nebraska currently is reviewing the constitutionality of electrocution. *See State v. Moore*, 730 N.W.2d 563, 564 (Neb. 2007) (staying an execution until the court could consider electrocution’s constitutionality in another case on its docket).

¹⁷ While most states use pancuronium bromide as the paralytic agent, Oklahoma, where this three-drug combination was first developed, *see infra* Part II.A.1-2, switched in recent years to using vecuronium bromide, a compound indistinguishable from pancuronium. Denno, 76 *FORDHAM L. REV.* at 97 n.320.

¹⁸ The exceptions appear to be New Hampshire and New Jersey. New Hampshire, a state that has not executed anyone in decades and has never executed anyone by lethal injection, does not have a specific protocol. Denno, 76 *FORDHAM L. REV.* at app. at 126. New Jersey, which has had a *de jure* and *de facto* moratorium on executions for years, has a protocol that calls for

To the extent that the pervasiveness of lethal injection, and, in particular, the three-drug lethal injection protocol, suggests independent, state-by-state legislative evaluation of the method, history tells a dramatically different story. The historical evidence demonstrates that states adopted the nearly ubiquitous three-drug lethal injection protocol quickly and haphazardly. In so doing, they engrained a seemingly modern, scientific method of execution without conducting any relevant medical or scientific study or soliciting input from appropriate experts.

Oklahoma was the first state to adopt a lethal injection protocol, in 1977. Almost immediately thereafter, state after state—including Kentucky—uncritically copied Oklahoma’s procedure. This historical process was succinctly described by the trial court in this case:

There is scant evidence that ensuing States’ adoption of lethal injection was supported by any additional medical or scientific studies that the adopted form of lethal injection was an acceptable alternative to other methods. Rather, it is this Court’s impression that the various States simply fell in line relying solely on Oklahoma’s protocol . . . in drafting and approving a lethal

only two drugs, thiopental and potassium chloride. *See Denno*, 63 OHIO ST. L.J. at app. 2 at 232.

injection protocol. Kentucky is no different.

JA 755-56.

This Part details this historical development of lethal injection in the United States.

A. The Historical Development of Lethal Injection Protocols Nationally.

1. Oklahoma's Lethal Injection Legislation

As scholars and courts consistently have recognized, lethal injection as currently practiced in the United States was born in Oklahoma in 1977. *See, e.g.,* Denno, 76 FORDHAM L. REV. at 65; BANNER, *supra*, at 297; JA 755; *Beardslee v. Woodford*, 395 F.3d 1064, 1073 (9th Cir. 2005). What is less known, however, is that prior to Oklahoma's adoption of lethal injection, variations of the practice were earlier considered and rejected by those who engaged in careful study. *See* N.Y. COMM'N REPORT, *supra*, at 75 (1888 Report describing the New York Commission's two-year study and conclusion that, based upon the procedures available at the time and as a result of objections from the medical profession, cyanide injection should be rejected as a substitute for hanging); REPORT OF THE ROYAL COMMISSION ON CAPITAL PUNISHMENT 1949-1953 at 257, 261 (describing 5-year study in the 1950s of the United Kingdom's death penalty system and the Commission's conclusion, based on medical and scientific input concerning the feasibility of lethal injection and its administration at the time, that

there was a lack of “reasonable certainty” that lethal injection executions could be carried out “quickly, painlessly and decently”).

The process that led to Oklahoma’s adoption of lethal injection in 1977 stands in stark contrast to the extensive medical input and study of practical administration issues that marked the earlier deliberations undertaken by the New York and British commissions. As explained below, the Oklahoma “process”—though motivated by a desire for a more humane execution procedure—was devoid of meaningful scientific and medical study.

The modern legislative reform effort toward lethal injection began in Oklahoma in 1976—the year this Court’s decision in *Gregg v. Georgia* allowed capital punishment to proceed. The post-*Gregg* move toward lethal injection was spearheaded by two members of the Oklahoma state legislature: State Representative Bill Wiseman and State Senator Bill Dawson. Both of these legislators were concerned about the inhumanity, visceral brutality, and cost of the then-current execution method, electrocution.¹⁹ They therefore sought to propose an alternative, more humane method of execution.

¹⁹ See Denno, 76 FORDHAM L. REV. at 66; see also William J. Wiseman, Jr., *Confessions of a Former Legislator*, CHRISTIAN CENTURY, June 20-27, 2001, at 6, available at http://findarticles.com/p/articles/mi_m1058/is_19_118/ai_76512812 (“I would make the death penalty more humane by eliminating the brutality and violence of electrocution.”); Tim Barker, *Author of Lethal Injection Bill Recalls His Motive*, TULSA WORLD, Sept. 7,

Unable to secure assistance from the Oklahoma Medical Association, Wiseman and Dawson turned to A. Jay Chapman, Oklahoma's chief medical examiner at the time. Denno, 76 *FORDHAM L. REV.* at 65-66. Chapman agreed to assist the legislators despite his admitted dearth of relevant expertise. Indeed, Chapman commented when the legislators approached him that he "was an expert in dead bodies but not an expert in getting them that way." *Id.* at 66. Nevertheless, Chapman met with Wiseman and soon thereafter hastily dictated a method of execution as follows:

An intravenous saline drip shall be started in the prisoner's arm, into which shall be introduced a lethal injection consisting of an ultra-short-acting barbiturate in combination with a chemical paralytic.

Id. at 66-67; *see also* Wiseman, *supra* n.19, at 7.

The first category of drug Chapman included, an "ultra-short-acting barbiturate," is an anesthetic that can act quickly to cause a low-level of unconsciousness. The second category of drug, "a chemical paralytic," sometimes referred to as a "neuromuscular blocking agent," paralyzes the body's muscles. According to Chapman, he

1990, at A1. Oklahoma had adopted lethal gas as an execution method in 1951, provided, however, that electrocution would be used until the state could build a gas chamber, which it never did. *See* Denno, 63 *OHIO ST. L.J.* at app. 2 at 201 n.121.

suggested sodium thiopental as the ultra-short-acting barbiturate and chloral hydrate as the paralytic. Denno, 76 FORDHAM L. REV. at 67. Although these specific drugs apparently were considered and discussed with Chapman at the time, the legislators chose instead to propose vague statutory language, which specified neither specific drugs nor doses. *Id.* They did so because they were uncertain how much time would pass before a lethal injection execution would be carried out and thus contemplated that drug technology might advance by that time. *See id.* In effect, the result of this decision was the delegation to Oklahoma prison officials of all critical decisions regarding the implementation of lethal injection.

Dawson also sought input from Stanley Deutsch, the head of the Oklahoma Medical School's Anesthesiology Department. *Id.* According to Deutsch, the consultation consisted of a single telephone conversation, followed by a letter from Deutsch recommending drug types and quantities that could be used for the "combination of ultra short acting barbiturate and neuromuscular blocking drugs." *Id.* For the ultra-short-acting barbiturate, Deutsch suggested "Thiopental (Pentothal) or Methohexital (Brevital) in quantities of 2000mg." For the neuromuscular blocking drug (the paralytic agent), Deutsch recommended Succinylcholine, in a dose of 1000 mg, or a 20mg dose of either pancuronium or decamethonium. *Id.* at 67-68. The most detailed and updated historical analysis indicates that Deutsch's letter was dated *after*

introduction of the lethal injection bill and only two days prior to passage of the bill in the state senate. *Id.* No specific drug types or quantities, such as those proposed by Deutsch, were included in the legislation.

These two consultancies were the sum total of research conducted by Wiseman and Dawson into an execution method to replace the electric chair in Oklahoma. No historical evidence suggests that Wiseman, Dawson, Chapman, or Deutsch consulted any other doctors or scientists, conducted any studies, or considered any of the available evidence concerning the risks and dangers of lethal injection. *Id.* at 65, 70. Yet the lethal injection procedure that they were proposing had dangers that were foreseeable even in 1977. *See, e.g.*, Simon Berlyn, *Execution By the Needle*, NEW SCIENTIST, Sept. 15, 1977, at 676-77 (describing the likely dangers of a lethal combination of a fast-acting barbiturate and a chemical paralytic, including the “terrifying possibility . . . that if an insufficient dose of barbiturates were given in execution,” together with a paralytic, “a conscious victim would be unable to convey an experience of intense suffering”). But it was not until after the proposed method had been enacted into Oklahoma law that Chapman went on record discussing its potential dangers. *See* Jim Killackey, *Execution Drug Like Anesthesia*, DAILY OKLAHOMAN, May 12, 1977, at 1 (“Dr. A. Jay Chapman, state medical examiner, said that if the death-dealing drug is not administered properly, the

convict may not die and could be subjected to severe muscle pain.”).

The Oklahoma lethal injection bill introduced in early 1977 precisely tracked Chapman’s early formulation. The statutory language read:

The punishment of death must be inflicted by continuous, intravenous administration of a lethal quantity of an ultrashort-acting barbiturate in combination with a chemical paralytic agent until death is pronounced by a licensed physician according to accepted standards of medical practice.

An Act Relating to Criminal Procedure; Amending 22 O.S. 1971, Section 1014; and Specifying the Manner of Inflicting Punishment of Death, S.B. 10, 36th Leg., 1st Sess. (Okla. 1977).

The bill moved forward quickly, picking up broad support not only because of the concern for humaneness, but also because of economics. The renovation of the state’s damaged electric chair was estimated to cost \$50,000 and the construction of a gas chamber was estimated to cost upwards of \$250,000. In contrast, Dawson noted that each execution by lethal injection would cost approximately \$10. Denno, 76 *FORDHAM L. REV.* at 71. The bill passed the Oklahoma State Senate on March 3, 1977 and the Oklahoma House of Representatives on May 9, 1977. It was signed into law on May 10, 1977, making Oklahoma the first

state to authorize execution by lethal injection. Okla. Stat. Ann. tit. 22, § 1014 (West 2006).

2. *Oklahoma's Lethal Injection Protocol*

As noted above, Oklahoma's statutory description of lethal injection was purposefully vague. See Jim Killackey, *Officials Draw Grim Execution Scene*, DAILY OKLAHOMAN, Nov. 12, 1979, at 1. With this vagueness, the legislature effectively delegated to the Department of Corrections the responsibility for determining how precisely to carry out a lethal injection execution—what drugs to use, what dosage, who would administer the drugs and how. See Denno, 63 OHIO ST. L.J. at 69. This ad hoc process required no specific implementation procedures, no record-keeping, no reporting, no studies, no vetting of experts—in other words, no oversight of any kind.

Free from scrutiny, Chapman again became the key player. In 1978 and 1981, Chapman assisted officials in developing the details of the protocol. Denno, 76 FORDHAM L. REV. at 73-75. Although a humane method of execution was the driving force behind Oklahoma's legislative change, it does not appear to have been Chapman's motivation. Questioned on why he recommended the drugs that he did, Chapman has responded by focusing on the crime victims he had seen as the State's chief medical examiner:

Perhaps hemlock is the answer for all the bleeding hearts who completely forget about the victims—and their

suffering—Socrates style. The things that I have seen that have been done to victims is [sic] beyond belief. And we should worry that these horses' patoots should have a bit of pain, awareness of anything—give me a break.

Id. at 74 n.151.

It was in the course of Chapman's behind-the-scenes work with the department of corrections that a third drug, potassium chloride, was added to the two-drug mix that Chapman had first recommended. *Id.* at 74. Potassium chloride, also known as rock salt, is a chemical often used to melt ice. In humans, it works to stop the heart. If an inmate receiving potassium chloride is not sufficiently anesthetized before receiving the drug, it is undisputed that he will suffer excruciating pain prior to death. Brief for Petitioners at 11-12, *Baze v. Rees*, No. 07-5439 (U.S. 2007). Moreover, the second drug—the paralytic agent—serves no purpose other than to paralyze the inmate, masking any expression of pain.

3. Other States Copied Oklahoma's Legislation

Despite the unstudied way in which lethal injection was developed in Oklahoma, a ripple effect soon occurred. State after state followed Oklahoma's lead and legislatively adopted lethal injection. Texas, Idaho, and New Mexico followed almost immediately.²⁰ Within four years, five states had

²⁰ See 1977 Tex. Gen. Laws 138 § 1 (switching from electrocution to lethal injection); 1978 Idaho Sess. Laws 70 § 1 (switching

switched to lethal injection. That progression continued steadily:

From 1977 to 2002, thirty-seven states adhered to this adoption pattern, switching to lethal injection in a fast-moving cascade of multi-state clusters, indicating that shared forces and communications fueled legislative action.

Denno, 76 *FORDHAM L. REV.* at 78; *see also* Denno, 82 *IOWA L. REV.* at 408, app. 3 at 439 tbl. 7.

Far more significant than the fact that a parade of states followed Oklahoma and switched to lethal injection, however, is that the states making this change simply mirrored Oklahoma's vague legislative approach and drug combination choices without conducting any independent studies or research. As the trial court found: "[T]here is scant evidence that ensuing States' adoption of lethal injection was supported by any additional medical or scientific studies . . . [Rather] the various States simply fell in line relying solely on Oklahoma's protocol." JA 755-56; *see also* *Beardslee*, 395 F.3d at 1074 n.11 (noting that "[t]he history of the use of the three chemical protocol gives some force to [the] argument that . . . the precise protocol was never subjected to the rigors of scientific analysis"); *Evans v. State*, 914 A.2d 25, 76-77 & n.17 (Md. 2006)

from hanging to lethal injection); 1979 N.M. Laws 150 § 8 (switching from lethal gas to lethal injection).

(noting that Maryland’s statutory language is “nearly identical” to the states that previously switched to lethal injection and that at least twenty-four states use the same three-drug combination rooted in Oklahoma); Denno, 76 *FORDHAM L. REV.* at 79.

Thus, Oklahoma’s hurriedly devised legislation and protocol became the basis for lethal injection in nearly every death penalty state in the country without ever being subjected to critical analysis.²¹

4. *Other States’ Protocols*

Importantly, because states consistently have copied Oklahoma’s vague lethal injection legislation, they also, like Oklahoma, have delegated the task of creating specific execution procedures to unqualified prison personnel. *See* Denno, 63 *OHIO ST. L.J.* at 66. In deciding what drugs to use, what dosage to administer, and other implementation procedures, many prison officials across the country borrowed from the Oklahoma protocol that had been crafted by the admitted non-expert, Chapman.

Even more remarkably, other states filled the legislative void with guidance from Fred Leuchter,

²¹ The federal government also executes by lethal injection and delegated the task of designing the protocol to Federal Bureau of Prisons officials. *See* 28 C.F.R. § 26.3(a)(4) (2007). In preparation for the execution of Timothy McVeigh in 2001, federal prison officials attended four state lethal injection executions and adopted the same three-drug protocol. *See* Kevin Johnson, *Federal Warden Prepares for ‘Unnatural’ Job*, *USA TODAY*, May 8, 2001, at 4A.

commonly referred to as “Dr. Death.” *See, e.g., Dr. Death and His Wonderful Machine*, N.Y. TIMES, Oct. 18, 1990, at A24. After *Gregg* and until approximately 1990, Leuchter—a man with no medical, scientific, or engineering background—dominated the execution “business” in the United States. During that time period, Fred A. Leuchter Associates, Inc. was the only commercial provider of execution equipment and training in the country. *See* Susan Lehman, *A Matter of Engineering: Capital Punishment As a Technical Problem*, ATLANTIC MONTHLY, Feb. 1990, at 26; Deborah W. Denno, *Is Electrocution an Unconstitutional Method of Execution? The Engineering of Death over the Century*, 35 WM. & MARY L. REV. 551, 626 (1994). Leuchter became the country’s primary “expert” in designing execution technology, including gallows, electric chairs, gas chambers, and, eventually, lethal-injection machines. *See* STEPHEN TROMBLEY, THE EXECUTION PROTOCOL: INSIDE AMERICA’S CAPITAL PUNISHMENT INDUSTRY 3-94 (1992); James Bandler, *Fred Leuchter: Killing Time with Death’s Efficiency Expert*, IN THESE TIMES, June 20-July 3, 1990, at 22.

Between 1979 and 1990, Leuchter either consulted with or provided execution equipment to at least twenty-seven states. Denno, 35 WM. & MARY L. REV. at 627 n.496. A large number of those states relied upon Leuchter to guide their administration of lethal injection, despite the fact that he had no relevant expertise. For example, New Jersey hired Leuchter to provide guidance on lethal injection

“only because [he] built the electric chair helmet for South Carolina.” TROMBLEY, *supra*, at 76. Nonetheless, over time Leuchter developed and profited from a “lethal injection machine,” which further engrained the three-drug protocol. *Id.* at 79.

Leuchter’s dominant influence came to an abrupt halt in 1990 after it was revealed that he had lied about having engineering credentials, a revelation that ultimately resulted in Leuchter being charged with criminal fraud.²² An “*Expert*” on *Executions is Charged with Fraud*, N.Y. TIMES, Oct. 24, 1990, at A14. This information did not surface because state department of corrections officials seriously probed Leuchter’s claimed credentials—they did not. Rather, it came out during Leuchter’s testimony in support of Holocaust-denier Ernst Zundel, who was on trial in Canada for violating Canada’s “spreading false news” prohibition. See Bandler, *supra*, at 22. When Leuchter testified that the Nazis could not have used gas chambers for mass exterminations in concentration camps, the prosecutor exposed that Leuchter had fabricated his engineering credentials. *Id.* This led Massachusetts to charge Leuchter with fraud, after which states quickly distanced themselves from any relationship with him. See

²² In June 1991, Leuchter pled guilty and signed a consent decree acknowledging that he had falsely represented himself as an engineer to various state correctional departments. Consent Agreement at 1, *Commonwealth v. Leuchter*, No. EN 90-102 (Mass. Dist. Ct. June 11, 1991).

Michael D. Hinds, *Making Execution Humane (or Can It Be?)*, N.Y. TIMES, Oct. 14, 1990, at 1.

One state that Leuchter advised was Texas, Denno, 35 WM. & MARY L. REV. at 627 n.496, where the first lethal injection execution occurred. Although Texas veterinarian Dr. Gerry Etheredge had advised prison officials to use the single-drug method regularly employed in animal euthanasia, an overdose of an anesthetic,²³ Texas abandoned this recommendation before it carried out its first execution. Using the three-drug Oklahoma formulation, Texas executed Charles Brooks, Jr. on December 7, 1982. See TROMBLEY, *supra*, at 75 (reporting that the Texas warden mistakenly mixed all three drugs into a single syringe, causing the mixture to turn into “white sludge”); see also MARQUART ET. AL., *supra*, at 143.

While a quarter-century has passed since Brooks’ execution, state prison officials continue to use the same lethal injection method and botch executions. Officials stab at inmates, trying to find suitable veins; intravenous lines infiltrate, sending the lethal chemicals into the tissue instead of the bloodstream; and inmates gasp and convulse, apparently in pain. See, e.g., Denno, 63 OHIO ST. L.J. at app. 1 at 139-42 tbl. 9; Brief for Petitioners at 20-24. Evidence of such pain, visible only when not masked by the paralyzing effects of pancuronium bromide,

²³ See Robbie Byrd, *Informal Talks Opened Door to Lethal Injection*, THE HUNTSVILLE ITEM, Oct. 4, 2007, available at http://www.itemonline.com/local/local_story_277004148.html.

contradicts the original legislative conception of a humane execution.

B. The Historical Development of Kentucky's Lethal Injection Protocol.

As the trial court observed, “Kentucky is no different” from other states adopting lethal injection; in 1998, Kentucky “simply fell in line relying solely on Oklahoma’s protocol.” JA 755-76. Despite a stated goal of searching for the most humane execution method available, Kentucky—like other states—reflexively and unquestioningly adopted the three-drug protocol without performing any independent study or analysis. And, like other states, Kentucky delegated responsibility for creating lethal injection procedures to unqualified and unaccountable prison officials.

Until 1998, electrocution was the sole method of execution authorized under Kentucky law. Ky. Rev. Stat. Ann. § 431.220 (LexisNexis 1996). At that time, Kentucky was one of only six states that relied solely on electrocution, whereas 32 of the 38 capital punishment states provided for lethal injection either solely or as an alternative method. *Issues Confronting the 1998 General Assembly*, Kentucky Legislative Research Commission (Sept. 1997), at 98.

In anticipation of the 1997 execution of Harold McQueen—the first execution in Kentucky in thirty-five years—Kentucky legislators considered a bill to replace electrocution with lethal injection, which was viewed as a humane alternative. *Lawmaker Wants*

Lethal Injection Offered as Execution Alternative, LEXINGTON HERALD-LEADER, Mar. 15, 1997, at C4. As the bill's sponsor, State Representative Mike Bowling explained: "[I]f we are going to do capital punishment, it needs to be done in the most humane manner." *Id.*

McQueen was executed by electrocution in July 1997, before the full legislature acted upon the lethal injection bill. Bill Estep, *House Committee Approves Lethal Injection*, LEXINGTON HERALD-LEADER, Jan. 9, 1998, at A1. Nonetheless, the Kentucky legislature overwhelmingly passed the lethal injection bill in early 1998. Bill Estep, *House Votes for Execution by Injection; Those Condemned May Have Choice in Form of Death*, LEXINGTON HERALD-LEADER, Jan. 15, 1998, at A1. The Kentucky Senate approved the measure by an equally decisive vote of 34-2-1. See <http://www.lrc.ky.gov/recarch/98rs/HB27.htm>.

The Kentucky measure was signed into law on March 31, 1998 and mandated that all future sentences of death proceed by lethal injection. Ky. Rev. Stat. Ann. § 431.220(1) (West 2006); 1998 Ky. Acts ch. 220, § 1 (HB 27). That same legislation provided that all previously imposed sentences of death proceed by lethal injection unless the inmate chooses electrocution. Ky. Rev. Stat. Ann. § 431.220(1) (West 2006).

The 1998 legislation did not specify a lethal injection protocol. Rather, like other states, the Kentucky statute employed general language,

effectively delegating the particulars to prison officials:

Except as provided in paragraph (b) of this subsection, every death sentence shall be executed by continuous intravenous injection of a substance or combination of substances sufficient to cause death. The lethal injection shall continue until the prisoner is dead.

Id. § 431.220(1)(a).²⁴

The then-Warden of the Kentucky State Penitentiary, Philip Parker, ultimately instituted the lethal injection protocol for Kentucky. JA 756; Brief for Petitioners at 13. The process for creating that protocol was anything but scientific. Soon after the bill was signed into law—if not earlier—Parker and other Kentucky officials simply settled on the same three drugs they believed were being used by the many states relying on Oklahoma’s 20-year old protocol: sodium thiopental, pancuronium bromide, and potassium chloride. JA 760-61, 139-42, 157, 225-27; James Prichard, *Team Practices Lethal Injection*, LEXINGTON HERALD-LEADER, July 26, 1998, at B1 (describing “run-throughs” of lethal injections held by Parker and his “execution team” since early 1998); Estep, Jan. 9, 1998, *supra*, at A1 (prior to the

²⁴ The 1998 legislation also expressly forbade any involvement by physicians in executions “except to certify cause of death provided that the condemned is declared dead by another person.” *Id.* § 431.220(3).

enactment of the lethal injection bill, Kentucky officials already were “drawing up procedures to carry out an execution by lethal injection” based on information from other states). In parroting other states’ procedures, Kentucky officials “did not conduct any independent scientific or medical studies or consult any medical professionals concerning the drugs and dosage amounts to be injected into the condemned.” JA 760. Indeed, the officials who created Kentucky’s protocol did not and do not understand the purpose and effect of the three-drug combination. JA 73, 142, 159-60, 214-15.

Not only did Kentucky officials fail to engage in a deliberative process in developing the state’s lethal injection protocol, but they, like officials from other states, also failed to acquire or train personnel who were qualified to administer the protocol. *See generally* Brief for Petitioners at 12-20, 45-50. Instead, then-Warden Parker formed an “execution team” of prison staff members—none a doctor or nurse—to perform lethal injections. Prichard, July 26, 1998, *supra*, at B1. The team members, including Parker, determined that the intravenous needle insertion posed difficulties and caused pain. *Id.* Indeed, “[o]n one occasion in which Parker himself volunteered for the test, the needle being placed into his arm went through the intended vein, sending a saline solution into the tissue and causing the warden some pain for a couple of days.” *Id.*

Given that Kentucky has delegated control of the lethal injection process to manifestly unqualified

officials and personnel, it is no surprise that the state's actual implementation of lethal injection is rife with grave, yet preventable risks. *See generally* Brief for Petitioners at 12-20, 45-50. Moreover, state prison officials have failed to implement appropriate changes in their lethal injection protocol, either before or since the present litigation. When prison officials tweaked Kentucky's lethal injection protocol after this litigation was initiated, they again failed to consult a relevant expert or provide any medical justification. JA 760-61. The changes made by prison officials—giving the “execution team” more time to establish intravenous access and the ability to administer additional barbiturate if deemed necessary by the Warden, within his sole discretion—merely reinforce that the state's unwarranted reliance on untrained, unaccountable personnel is seriously misplaced. *See* Brief for Petitioners at 14-15 (describing the risks created by allowing extended time for establishing intravenous access); *id.* at 18 (describing the Warden's lack of understanding of anesthetization).

III. IMPORTANT ASPECTS OF THE HISTORY OF LETHAL INJECTION IN THE UNITED STATES CONTINUE TO HINDER INFORMED PUBLIC SCRUTINY ABOUT THE METHOD AND ITS HUMANENESS.

1. As the history detailed above demonstrates, at the time that state legislatures, including Kentucky's, enacted lethal injection legislation, they failed to engage in reasoned consideration of how to

implement the procedure so as to minimize the risks of unnecessary pain or suffering. Despite a legislative goal of implementing executions in a humane and less painful manner, states did not consult relevant medical or scientific experts, they did not engage in or commission studies, and they did not consider existing information regarding the dangers of improper drugs and administration. Nor did they require even minimal qualifications or training of personnel who would conduct the executions. Rather, following Oklahoma's lead, states enacted lethal injection in a vacuum of scrutiny where flawed procedures fester.

Moreover, several features of the history of lethal injection have led to the *continued* repression of public scrutiny of the procedure and its implementation. *First*, by copying Oklahoma's vague statutory language and three-drug protocol, other states were led to mirror Oklahoma's delegation to unqualified prison officials of the responsibility for creating specific lethal injection procedures. Denno, 63 OHIO ST. L.J. at 65, 69. Such delegation has caused problems nationwide. Some states turned to unqualified "experts" in execution methods, such as Leuchter. *See supra* Part II.A.3. Recently, litigation in Missouri uncovered the fact that the state had no written protocol. *Taylor v. Crawford*, No. 05-4173-CV-C, 2006 WL 1779035, at *7 (W.D. Mo. June 26, 2006), *rev'd*, 487 F.3d 1072 (8th Cir. 2007), *cert. pending*. In Kentucky, such delegation resulted in the creation of procedures by prison officials who admitted they lacked the

knowledge to make such decisions. *See supra* Part II.B.

Prison officials' creation of these procedures often has been considered exempt from the requirements of state administrative law, thus shielding the procedures from public analysis and comment. *See, e.g., Hill v. McDonough*, 126 S. Ct. 2096, 2100 (2006) (noting that Florida's policies for implementing lethal injection "appear exempt from Florida's Administrative Procedure Act"); *see also Bowling v. Ky. Dep't of Corr.*, No. 06-CI-00574 (Ky. Franklin Cir. Ct. Dec. 27, 2006) (vacating a previous decision holding that lethal injection procedures were subject to administrative enactment procedures). As a result, prison officials' determinations of how to implement lethal injection largely have remained hidden from public scrutiny.

Second, to the extent that states have developed specific protocols, an extremely high level of secrecy surrounds such protocols and their administration, frustrating attempts to evaluate them. *See Denno*, 76 *FORDHAM L. REV.* at 95, *see also* Ellyde Roko, Note, *Executioner Identities: Toward Recognizing a Right to Know Who Is Hiding Beneath the Hood*, 75 *FORDHAM L. REV.* 2791, 2817 (2007) (arguing that the public and courts must know whether individuals carrying out lethal injections possess the necessary qualifications). States' efforts to conceal execution procedures include restricting witnesses to viewing only limited portions of the process. *See, e.g., Cal. First Amendment Coal. v. Woodford*, 299

F.3d 868, 870-71 (9th Cir. 2002) (holding that prison officials could not justify restrictions on witnesses' viewing certain parts of an execution).²⁵

States resist public disclosure of their execution procedures not only in general information requests, but also in litigation itself. *See, e.g., Hill*, 126 S. Ct. at 2100 (“Hill requested information about the lethal injection protocol, but the department provided none”); *Nelson v. Campbell*, 541 U.S. 637, 641 (2004) (noting that the inmate’s counsel had requested a copy of the protocol, but that the warden denied the request); *see also* Brief for Amicus Curiae Darick Demorris Walker Supporting Petitioners at 5, *Hill v. McDonough*, No. 05-8794 (U.S. 2006) (detailing strenuous efforts by Virginia to shield its execution procedures from disclosure during the course of litigation). Even when courts force states to provide inmates information regarding execution protocols, many courts allow this information to be kept under seal and impose extremely restrictive protective orders on inmates’ counsel, at the states’ insistence. *See id.* Indeed, the Kentucky protocol at issue here is under seal.

States also have long attempted to insulate their protocols from genuine evaluation by hiding behind the similarities among states. States regularly point

²⁵ *See also* Denno, 63 OHIO ST. L.J. at 124 (finding that states often prevent witnesses from viewing various parts of the execution, such as the insertion of the intravenous lines, and noting that no state had embraced the Ninth Circuit’s holding in *California First Amendment Coalition*).

to consistency among state protocols—particularly the use of the three-drug combination—to attempt to forestall inquiry into the merits of those protocols. See, e.g., *Workman v. Bredesen*, 486 F.3d 896, 907 (6th Cir. 2007), *cert. denied*, 127 S. Ct. 2160 (2007). Such circular logic is faulty, however, because, as the above-described history shows, states use similar protocols because they copied Oklahoma, not because they independently investigated how to implement lethal injection and separately arrived at the same conclusion.

Third, the very nature of the second drug in the three-drug sequence masks the grim realities of the procedure from meaningful public scrutiny. Because the second drug used in nearly all lethal injection executions is an unnecessary paralytic agent, an inmate suffering pain during the process will be physically unable to express his agony. See *Morales v. Tilton*, 465 F. Supp. 2d 972, 975, 980 (N.D. Cal. 2006); see also Denno, 76 FORDHAM L. REV. at 55-56. Therefore, witnesses—including members of the media who inform the public about state executions—see a highly sanitized version of the procedure’s painful realities.

2. The relative lack of scrutiny and transparency regarding lethal injection is beginning to change. As a result of recent litigation—and, in particular, the existence of constitutional judicial oversight—states have been forced to provide details about their development and implementation of lethal injection. These disclosures finally are permitting the sort of

deliberation and investigation that should have been conducted by states at the outset. As the emerging facts and history have led some courts to conclude, “[w]hatever the merits of the protocol in the abstract, there can be no real doubt that Defendants’ implementation of [California’s protocol] has major flaws.” *Morales*, 465 F. Supp. 2d at 974.

Given how engrained the current lethal injection protocol has become—despite that protocol’s shaky history—judicial oversight has been an integral part of this emerging reevaluation of lethal injection. Thoughtful examination will continue only if this Court reinforces the necessity of Eighth Amendment review of the factual reality of states’ chosen lethal injection drugs, procedures, and administration. As the district court in Tennessee recently affirmed: “These [recent] cases demonstrate that, although lethal injection is the most prevalent form of execution, it is not sacrosanct, and . . . the constitutionality of a three-drug protocol is depend[e]nt on the merits of that protocol.” *Harbison v. Little*, __ F. Supp. 2d __, No. Civ. 3:06-01206, 2007 WL 2821230, at * 30 (M.D. Tenn. Sept. 19, 2007).

Lethal injection’s peculiar history also has caused a systemic failure of democratic reform. The factors described in this Part have shielded lethal injection from the kind of public scrutiny that has led states in the past to reform execution methods. *See supra* Part I. As a result of lethal injection’s history and attendant secrecy, a needlessly flawed protocol has

become entrenched and the details of lethal injection implementation have escaped public scrutiny. Given this historical context, deference to state legislative determinations is unwarranted; courts must carefully review execution methods to ensure that they are free of severe and unnecessary pain. *See, e.g., Morales v. Hickman*, 438 F.3d 926, 926 (9th Cir. 2006) (per curiam) (stating that *Gregg* proscribes procedures that create “a foreseeable and undue risk [of] . . . unnecessary and wanton pain”), *cert. denied*, 546 U.S. 1163 (2006); *Morales*, 465 F. Supp. 2d at 974 (applying “undue and unnecessary risk” standard).

Although the Supreme Court of Kentucky was aware of the historical development of the state’s lethal injection protocol, it erred by failing to take that history into account in determining the standard by which the state’s method must be scrutinized under the Eighth Amendment.

CONCLUSION

The decision of the Supreme Court of Kentucky should be reversed.

Respectfully submitted,

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