

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 PETITIONERS

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QUESTIONS PRESENTED

- I. Does the Eighth Amendment to the United States Constitution prohibit means for carrying out a method of execution that create an unnecessary risk of pain and suffering as opposed to only a substantial risk of the wanton infliction of pain?
- II. Do the means for carrying out an execution cause an unnecessary risk of pain and suffering in violation of the Eighth Amendment upon a showing that readily available alternatives that pose less risk of pain and suffering could be used?
- III. Does the continued use of sodium thiopental, pancuronium bromide, and potassium chloride, individually or together, violate the cruel and unusual punishment clause of the Eighth Amendment because lethal injections can be carried out by using other chemicals that pose less risk of pain and suffering?

LIST OF PARTIES

Pursuant to Supreme Court Rule 24.1(b), the following list identifies all of the parties before the Kentucky Supreme Court.

Ralph Baze and Thomas C. Bowling were the appellants below. They are the Petitioners in this action. John D. Rees, Glenn Haeberlin, and Ernie Fletcher, were appellees below.

Glenn Haeberlin has since been replaced by Thomas Simpson as Warden of the Kentucky State Penitentiary. Pursuant to Supreme Court Rule 35.3, Warden Simpson has been substituted as a party.

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JURISDICTION

The Kentucky Supreme Court issued its decision on November 22, 2006, and denied the timely petition for rehearing on April 19, 2007. The petition for a writ of certiorari was filed on July 11, 2007. This Court has jurisdiction pursuant to 28 U.S.C. § 1257(a).

CONSTITUTIONAL PROVISION INVOLVED

This case involves the Eighth Amendment to the Constitution, which provides in relevant part: “Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.” U.S. Const. amend. VIII.

STATEMENT OF THE CASE

A. Evolution Of Methods Of Execution

The evolution of execution methods in this country reflects a continuing quest to find a more humane means of killing, as each new method turns out to be less humane than intended. The problems are not always perceived as promptly as they could be, but their perception produces change aimed at eliminating unnecessary dangers of severe pain.

Hanging. In the 19th century, hanging was the predominant method of execution in the United States. Deborah W. Denno, *Getting to Death: Are Executions Constitutional?*, 82 Iowa L. Rev. 319, 364-65 (1997) (noting that 48 States or territories conducted executions by hanging in the 19th century). At the beginning of the 20th century, hanging was superseded by electrocution and gas, because of a recognition that hanging subjected inmates to the risk of an unnecessarily painful and prolonged death *In re Storti*, 60 N.E. 210, 210 (Mass. 1901) (Holmes, C.J.) (explaining that the rejection of hanging and adoption of electrocution was “was devised for reaching the end proposed as swiftly and painlessly as possible”). By 1913, 35 States had abandoned hanging. Today, no State relies on hanging as a method of execution.¹ 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, 129 (2002).

Electrocution. After its introduction in the late 19th century, electrocution was widely hailed as a new, humane method of execution that took advantage of scientific advances to ensure a quick death. *See, e.g., In re Kemmler*, 136 U.S. 436, 444 (1890) (upholding New York’s electrocution statute and noting it was the product of a commission charged with identifying the “most humane and practical method known to modern science of carrying into effect the sentence of death”); *Malloy v.*

¹ Two States allow the condemned to choose hanging. Denno, 63 Ohio St. L.J. at 129.

South Carolina, 237 U.S. 180, 185 (1915) (“Influenced by the results in New York, eleven other States have adopted the same mode for inflicting death in capital cases; and, as is commonly known, this result is the consequent of a well grounded belief that electrocution is less painful and more humane than hanging.”) (footnote omitted); 1923 Tex. Gen. Laws ch. 51, §§ 1, 14 (changing from hanging to electrocution and referring to the “fact” that hanging “is antiquated and has been supplanted in many states by the more modern and humane system of electrocution.”). Over time, botched electrocutions (people catching on fire, bleeding) led to increasing concern as to whether electrocution was humane. *State v. Gee Jon*, 211 P. 676, 682 (Nev. 1923) (noting Nevada’s adoption of lethal gas over electrocution due to concerns about the humaneness of electrocution); *Denno*, 82 Iowa L. Rev. at App. 2A (detailing 18 botched electrocutions since 1979). Today, only Nebraska relies on electrocution.² Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled The Death Penalty*, 76 Fordham L. Rev. 49, 93 (2007).

Lethal gas. Like electrocution, lethal gas was initially thought to be a humane improvement. *Gee Jon*, 211 P. at 682. Once again, botched executions eventually caused States to abandon the method. *Denno*, 82 Iowa L. Rev. at 367-68 (explaining that

² Nine States allow inmates sentenced to death before a certain date to choose electrocution. United States Department of Justice, Bureau of Justice Statistics, Table 2, *available at* <http://www.ojp.usdoj.gov/bjs/pub/pdf/cp05.pdf> (last visited Nov. 4, 2007).

“Jesse Bishop, the first person to die from lethal gas following *Gregg* in 1979, appeared to experience such pain and agony that Nevada abolished lethal gas and changed to lethal injection.”). Even when administered as intended, lethal gas often yielded disturbing results. *Gomez v. United States District Court*, 503 U.S. 653, 655 (1992) (Stevens, J., dissenting) (“Execution by gas ... produces prolonged seizures ... flailing, twitching of extremities, and grimacing” and causes “asphyxiation by suffocation or strangulation.”) (ellipsis in original). Today, no State relies on lethal gas as a method of execution.³ Denno, 76 Fordham L. Rev. at 59-60 n.51.

B. Lethal Injection.

1. The Genesis Of The Three-Drug Protocol.

The three-drug protocol currently used by Kentucky and the other States that have adopted lethal injection was first developed in Oklahoma in 1977, at the behest of a state legislator, who was aided in his endeavor by Dr. Stanley Deutsch, an anesthesiologist, and Dr. Jay Chapman, a medical examiner with no anesthesia training. JA 104-05; Denno, 76 Fordham L. Rev. at 66. The group decided to use a barbiturate anesthetic in combination with a neuromuscular blocker that would paralyze the inmate. But they did not identify specific drugs for

³ Four States provide for lethal gas as an alternative to lethal injection, United States Department of Justice, Bureau of Justice Statistics, Table 2, *available at* <http://www.ojp.usdoj.gov/bjs/pub/pdf/cp05.pdf> (last visited Nov. 4, 2007).

use in the process. *See* Denno, 76 Fordham L. Rev. at 67. The drugs chosen by the Oklahoma Department of Corrections were sodium thiopental, an ultra-short acting barbiturate anesthetic (also known as “thiopental”); and a long-acting paralytic.⁴ JA 105. Although Oklahoma uses vecuronium bromide as its paralytic agent, every other State, including Kentucky, eventually chose pancuronium bromide (hereafter, “pancuronium”) as the paralytic agent. Denno, 76 Fordham L. Rev. at 78. A third drug, potassium chloride (hereafter “potassium”) – which stops the heart but also causes excruciating pain – was later added, perhaps because the original protocol incorrectly stated that potassium was a paralytic agent.⁵ JA 105-14; 651-52. The group devising Oklahoma’s protocol did not consult any other physicians or veterinarians, conduct any medical or scientific research, or consider how, and by whom, the drugs would be administered in actual executions. JA 418-23; *cf. Beardslee v. Woodford*, 395 F.3d 1064, 1073-74 (9th Cir. 2005) (describing this history).

⁴ John Rees, Commissioner of the Kentucky Department of Corrections was employed by the Oklahoma Department of Corrections in the 1970’s and helped draft the State’s first lethal injection protocol. JA 249, 259. During the trial in this case, Rees testified that, other than that the chemicals are used in other States, he still does not know why thiopental, pancuronium, and potassium are used instead of different chemicals or a single-chemical formula. *Id.* 257.

⁵ The protocol required the “continuous, intravenous administration of a lethal quantity of sodium thiopental combined with either tubo-curarine or succinylcholine chloride or potassium chloride, which is an ultrashort-acting barbiturate combination with a chemical paralytic agent.” JA 651-52.

In devising Oklahoma's protocol, Chapman assumed that doctors would inject the drugs. Denno, 76 Fordham L. Rev. at 68 & n.118. Shortly after Oklahoma adopted lethal injection in 1977, he expressed alarm over how the three-drug protocol would be administered in practice. *Id.* at 72 (citing Jim Killackey, *Execution Drug Like Anesthesia*, Daily Oklahoman, May 12, 1977, at 1) ("Dr A. Jay Chapman, state medical examiner, said [in May 1977] that if the death-dealing drug is not administered properly, the convict may not die and could be subjected to severe muscle pain.").

The first lethal injection execution was performed in Texas in 1982. Denno, 76 Fordham L. Rev. at 79. Prior to that execution, Texas's department of corrections considered whether to adopt Oklahoma's three-drug protocol, and in the process, consulted Dr. Gerry Etheredge, a veterinarian. Etheredge suggested that the most reliably humane method of lethal injection would be an overdose of pentobarbital, the anesthetic most commonly used in animal euthanasia. Robbie Byrd, *Informal Talks Opened Door to Lethal Injection*, Oct. 4, 2007, The Huntsville Item, available at http://www.itemonline.com/archivesearch/local_story_277004148.html. Veterinary euthanasia methods, such as a lethal dose of pentobarbital, are the product of extensive professional study by veterinarians, undertaken with the goal of ensuring that a painless death can be achieved by personnel with varying levels of training and skill. *See* Br. of Amici Curiae Drs. Concannon, Geiser, and Pettifer in Support of Petitioner 1-4, *Hill v. McDonough*, No. 05-

8794 (S. Ct. 2006). Texas nevertheless rejected Etheredge's suggestion, and adopted Oklahoma's three-drug protocol. JA 112.

Other States followed suit, each adopting the three-drug protocol without conducting any research or analysis.⁶ As the trial court found, there is "scant evidence that ensuing State 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, ... the various States simply fell in line relying solely on Oklahoma's protocol." *Id.* 755-56. Today, with one exception, every State that has the death penalty employs lethal injection. Denno, 76 Fordham L. Rev. at 93.

2. Kentucky Adopts The Three-Drug Protocol.

In 1998, the Kentucky legislature adopted lethal injection as a method of execution. *See* Ky. Rev. Stat. § 431.220(a)(1) ("every death sentence shall be executed by continuous intravenous injection of a substance or combination of substances sufficient to cause death"). The task of determining the specific drugs to be used was left to the Department of

⁶ New Jersey's lethal injection protocol calls for the use of only two of the drugs in the standard three-drug formula, omitting the paralytic agent. JA 110. New Jersey has not conducted any executions by lethal injection. United States Department of Justice, Bureau of Justice Statistics, *available at* <http://www.ojp.usdoj.gov/bjs/data/exest.csv> (last visited Nov. 4, 2007). New Hampshire has adopted lethal injection by statute, but has no formal protocol specifying the chemicals to be used. Denno, 78 Fordham L. Rev. at 126.

Corrections (DOC). JA 760. DOC officials “were provided with little to no guidance on drafting a lethal injection protocol.” *Id.*

Instead of seeking medical input and expert advice, DOC officials “were resolved to mirror protocols in other states.” *Id.* Accordingly, like other States, the Kentucky DOC adopted the three-drug formula without “any independent scientific or medical studies or consulting any medical professionals concerning the drugs and dosages to be injected into the condemned.” *Id.*

Former Warden Phil Parker testified that he “didn’t have the knowledge to question [the chemicals] but [had] no reason to because [other States] were doing it ... on a regular basis.” JA 226. A Deputy Warden testified that “other States share[d] with us how they had done things” and “we took what they ... verbally gave us, we certainly made ... a mental note of it ... and brought it back.” JA 157.

None of the DOC officials involved in drafting the protocol understood why these three drugs were used in other States, or the effect of each drug. JA 73, 142, 159-60. For example, Parker testified that he had “no knowledge” that someone could be paralyzed by pancuronium yet still feel pain. JA 214-15.

Although the DOC went along with the trend in other States, it did so despite evidence that by 1998, numerous botched executions had occurred using the

three-drug formula.⁷ In 1995, for instance, Missouri's execution of Emmitt Foster caused a flurry of press coverage after Foster began convulsing and gasping on the gurney. *See Witnesses to a Botched Execution*, St. Louis Post-Dispatch, May 8, 1995, at 6B. And in 1992, Arkansas executioners were unable to find a vein in Ricky Rector, causing them to make a two-inch incision in Rector's arm in an attempt to find a vein. Rector was heard moaning throughout the fifty-minute process. Joe Farmer, *Rector, 40, Executed for Officer's Slaying*, Arkansas Democrat-Gazette, Jan. 25, 1992, at 1. In fact, the Kentucky legislature itself had earlier identified these problems, noting that "[s]ome doctors claim that prisoners could strangle or suffer excruciating pain during the chemical injections but may be prevented by the paralytic agent from communicating their distress," and "[t]here have been claims of botched executions." Legislative Research Committee, *Issues Confronting The 1998 General Assembly, Informational Bulletin No. 198*, at 99 (Sept. 1997), available at www.lrc.ky.gov/lrcpubs/Ib198.pdf (internal quotation marks omitted).

In 1999, Kentucky performed its first and only lethal injection execution, that of Eddie Lee Harper. JA 167. Because pancuronium hides signs of consciousness, there is no way to know whether Harper's execution was humane.

⁷ *See, e.g.*, Denno, 63 Ohio St. L.J. at 139-141 (detailing 31 botched lethal injection executions); Denno, 76 Fordham L. Rev. at 56-58 (discussing other botched lethal injection executions).

C. Kentucky's Lethal Injection Procedures.

Kentucky's execution procedures combine the dangerous three-drug formula copied from Oklahoma and other States with haphazard drug administration procedures carried out by unqualified execution personnel.

1. The Three-Drug Formula.

The formula that Kentucky adopted from other States consists of three drugs, the combination of which Dr. Mark Heath, Petitioners' expert anesthesiologist, characterized as "bizarre" because it employs a short acting barbiturate with a long acting paralytic followed by "an extremely painful way of stopping the heart." JA 426-27. The effects of the three drug formula were undisputed at trial.

Thiopental, the first drug injected, is a barbiturate anesthetic that must be mixed into solution shortly before it is used. *Id.* 430. Thiopental was frequently used to induce anesthesia in the 1970s, when the three-drug formula was first developed, because its ultra-short acting nature rendered it easy to use in conjunction with the longer-acting anesthetics that would keep patients anesthetized throughout surgery. *Id.* 429. Thiopental is rarely used today, and is almost never employed as the sole agent of anesthesia. *Id.* 429-31; 628.

The second drug, pancuronium, masks visible suffering by paralyzing the inmate's voluntary muscles. *Id.* 413-14. It has no analgesic or anesthetic properties, and therefore does not reduce consciousness or pain. *Id.* 436. A person given pancuronium alone would be conscious but paralyzed

and unable to breathe, and would eventually suffocate to death. *Id.* 437. The paralysis pancuronium causes would also preclude a person from communicating pain or distress. As Dr. Heath explained, “[a]ny person or animal who’d been given pancuronium, they are going to appear serene and tranquil and peaceful and comfortable, regardless of whether they are in fact awake and in agony.” *Id.* 441. Carol Weihrer, who has experienced conscious paralysis (also called anesthesia awareness) during surgery, testified that being awake while paralyzed “was the worst thing in your life. You, you are absolutely entombed in a corpse. You cannot move, but you are a hundred percent alert. It’s terrible.” *Id.* 397. Dr. Mark Dershwitz, the DOC’s expert witness in this case, described the sensation as “agonizing,” and “scary.” *Id.* 625-26.

The last drug injected, potassium, induces cardiac arrest. *Id.* 427, 561. When administered to a conscious person in concentrations sufficient to stop the heart, potassium causes excruciating pain. *Id.* 443-44. Dr. Dershwitz opined that a conscious person given potassium at the concentration level Kentucky uses would be “screaming” in agony. *Id.* 600, 604.

It is undisputed that “the administration of pancuronium bromide and potassium chloride, either separately or in combination, would result in a terrifying, excruciating death” if injected into a conscious person, *Harbison v. Little*, No. Civ. 3:06-1206, --- F. Supp. 2d ---, 2007 WL 2821230, at *11 (M.D. Tenn. Sept. 19, 2007). Consequently, inducing general anesthesia is “critical,” as Dr. Dershwitz put

it, to ensuring a humane execution. JA 558. General anesthesia – the level of anesthesia sufficient to prevent the sensation of severe pain, *id.* 407 – is necessary because the pain of potassium is similar in intensity to a “surgical stimulus,” *id.* 604, and could be felt by someone who is only lightly anesthetized, *id.* 406-07. If the intended dose of thiopental is not injected successfully, or does not bring about general anesthesia, the inmate will experience both the terror and agony of conscious suffocation and the excruciating pain caused by the potassium, but will appear peaceful and unconscious to observers. *Id.* 437, 441-42, 445. This drug combination is so sensitive to error and potentially inhumane that Kentucky law, like that of many other States, prohibits its use in animal euthanasia without anesthetic monitoring by trained professionals. *See* Ky. Rev. Stat. § 258.095(12); JA 458-59.

2. Kentucky’s Drug Administration System.

Despite these risks, Kentucky officials developed a convoluted drug delivery system that creates a significant likelihood of improper administration of the anesthesia.

Drug Preparation. At the outset of the execution procedure, the execution team must prepare the dose of thiopental and load it into syringes, a complicated process with numerous opportunity for errors. The three-gram dose of thiopental must be constituted from up to six separate kits of .5 grams of powder, JA 656, 844, 847, each of which must be individually mixed with solution. Although Dr. Dershwitz

testified that the physical act of mixing thiopental is simple, *id.* 623, the combination of several thiopental kits and accompanying calculations are difficult tasks for those who do not prepare drugs in their day-to-day job, and can lead to an insufficient dose of thiopental. *Id.* 472-73. Because three grams of thiopental is a dose rarely used in the medical context, the package insert does not contain instructions for combining several separate kits and drawing the solution up into one or more syringes. *Id.* 656-76. The thiopental packaging states that the only people who should mix or administer the sodium thiopental are those “trained and experienced in the administration of intravenous anesthetics.” *Id.* 528-29. The EMTs and phlebotomists responsible for mixing the thiopental in Kentucky have *not* been trained “in the administration of intravenous anesthetics.” *Id.* 529. Nor does the execution protocol specify the concentration of thiopental or provide any mixing instructions, even though the mixer must “know[] the concentration and volume” in order to create the proper dose. *Id.* 472-73, 987.

IV Problems. As DOC officials realized, ensuring reliable IV access is both difficult and crucial. Phil Parker, the Warden who wrote Kentucky’s execution protocol, testified that problems include “the I.V. failing [after the injection started] for what we could call, just in common language, a ‘blowout’ ... by pushing or injecting too vigorously or too hard.” *Id.* 217. A DOC nurse testified that different drugs have different prescribed rates of injection, and that to ensure that a chemical is not injected too vigorously, she would consult a book on how fast to inject the

chemicals. *Id.* 355-56. Yet, the execution protocol does not specify the rate at which the chemicals are to be injected, or how to determine that rate. *See generally id.* 912, 978-79.

IV infiltration – the condition that occurs when a catheter is not inserted completely into a vein, or goes through the vein – is a frequent occurrence even in clinical settings, *id.* 463, particularly in prisoners, who often have veins compromised by drug use. *Id.* 359, 772. If undetected, infiltration can result in the delivery of insufficient thiopental to induce general anesthesia, but sufficient pancuronium and potassium to paralyze and cause pain.⁸ *Id.* 461-65. An insufficient dose of thiopental can also result from leaks in the IV tubing, a partially dislodged catheter, and syringe errors. *Id.* 462-63.

Kentucky's protocol provides that the IV team – an emergency medical technician (EMT) and a phlebotomist – will place two separate catheters in peripheral veins. The team is allowed up to an hour to do so. *Id.* 285-86, 288, 976. Petitioners presented unrebutted expert testimony that if it is not possible to place a reliable IV in an individual within ten or fifteen minutes, that person probably does not have peripheral veins susceptible to a reliable IV

⁸ For instance, if an infiltration, leak, or other IV problem result in only 40% of each of the drugs reaching the inmate's circulation, the inmate would receive a dose of thiopental insufficient to fully anesthetize the inmate, but sufficient pancuronium and potassium to cause paralysis and excruciating pain, respectively. This may be what occurred during the December 2006 execution of Angel Diaz. *See infra* pages 20 to 21.

placement.⁹ *Id.* 474-76. Kentucky officials nevertheless decided, without consulting any doctors or other medical personnel, to require IV personnel to attempt to insert the IV lines for a full hour, thereby increasing the potential for improperly placed catheters and resulting failure in the delivery of anesthetic. *Id.* 256, 476, 976.

Further compromising the reliability of the IV insertion, the execution protocol instructs those inserting the IVs to “look for the presence of blood in the valve of the sited needle.” *Id.* 976. Dr. Mark Heath, Petitioners’ expert anesthesiologist, testified this procedure “really doesn’t make any sense at all. There is no valve in the sited needle,” and checking for a flash of blood is insufficient to determine whether an IV has been successfully inserted. *Id.* 466-67.

Moreover, Kentucky has also decided to leave the choice of which of the two IV lines should be used to inject the drugs to the warden, who has *no* expertise in IV insertion, even though the personnel who placed the IV lines would have a better sense of which catheter is more reliable. *Id.* 315. As the warden put it, “I try to determine in my mind which, which IV site I feel is the best” based on which IV

⁹ In such individuals, it may be necessary to place a central line in a larger vein to obtain reliable IV access. Central line placement is an invasive procedure that must be performed by a doctor or a professional with special training. The DOC has no procedure for placing a central line if necessary, JA 477, 976; and it was undisputed at trial that EMTs and phlebotomists are, except in rare cases, unable to place central lines. *Id.* 478.

site produces a larger flash of blood when the needle is inserted. *Id.*

Inadequate Facilities. The arrangement of Kentucky's execution facility makes problems of administration more likely and hinders their detection. The facility consists of a control room, execution chamber, and witness rooms. *Id.* 203. The inmate is strapped to a gurney in the center of the execution chamber. *Id.* 266. The execution team administers the drugs to the inmate remotely, from the control room, necessitating the use of IV tubing that snakes from the control room through a small hole in the wall, across the execution chamber, and to the inmate on the gurney. *Id.* 280. The execution team is separated from the inmate by one-way glass, *id.* 204-05, and is unable to see the side of the inmate facing away from the control room window.

Although the EMT and the phlebotomist are situated in the control room during the execution, they play no role in injecting the drugs. That task is performed by an executioner without medical training, who could be a different person for each execution. *Id.* 287.

From the control room vantage point, the execution team has only limited ability to monitor the condemned inmate. Team members are unable to monitor any catheter sites on the side of the inmate facing away from the control room window. The Warden and Deputy Warden are the only personnel in the execution chamber, but are at least ten feet from the gurney. *Id.* 276-77. The warden conceded that he cannot see both catheter sites, and

in any event, visual observation of the catheter sites is insufficient to determine whether a catheter is improperly inserted. *Id.* 340. The warden also stated that he will be too far away from the inmate to discern subtle signs of consciousness, such as tearing, *id.* 284, and Petitioners' expert anesthesiologist testified that observation from ten feet away, even if performed by a medically trained individual, is ineffective to determine consciousness. *Id.* 442, 462-63.

Untrained Personnel. The only medically trained personnel who have any role in the execution process are an EMT and a phlebotomist who insert the IVs. Although EMTs and phlebotomists are facially qualified to insert IV catheters, they have no experience with the numerous other tasks performed in an execution, including preparing the drugs, making the calculations necessary to prepare a three-gram dose of thiopental, detecting signs of inadequate anesthesia, or reacting to foreseeable contingencies such as a compromised IV line. *Id.* 529-30. EMTs and phlebotomists have only minimal medical expertise. Under Kentucky law, they are permitted to function only under the direct supervision of a doctor. Ky. Rev. Stat. § 311A.170 (EMT paramedic).¹⁰ The Warden never inquired into these team members' ability to carry out the execution protocol and react to foreseeable problems. He simply assumed that "[t]hey probably at least have some medical experience in being able to" prepare doses of intravenous anesthetic, and that

¹⁰ Petitioners are aware of no licensing requirements in Kentucky for phlebotomists.

“given the gravity of the situation that is occurring, those people know what to do.” JA 312, 279.

The warden and deputy warden have ultimate authority for the execution procedure. *Id.* 262. Yet they have no understanding of the foreseeable problems that can arise during the procedure or how to react to them. For instance, the warden admitted “I honestly don’t know what you’d look for” to tell the difference between an inmate who is paralyzed but conscious and an inmate who is anesthetized. *Id.* 283. Likewise, when asked what knowledge he has of anesthesia awareness or conscious paralysis, Deputy Warden Pershing responded, “none.” *Id.* 336.

In addition, although the warden is responsible for deciding what to do if the primary IV line becomes compromised, he testified that he would simply direct the execution team to move to the backup line, without first inquiring whether the IV problem prevented the full dose of thiopental from being injected. *Id.* 279-80, 318. This would be the worst possible way to react in this situation, as it creates the danger that the inmate will be given an insufficient amount of thiopental through the first, compromised IV, but then will receive the full doses of pancuronium and potassium through the backup IV.¹¹

¹¹ Although the protocol provides that the team will administer additional thiopental if the inmate does not “appear” unconscious to the warden after 60 seconds, that instruction will not prevent an error of this kind. If the inmate receives enough thiopental through the compromised IV to be lightly anesthetized, the inmate will “appear” unconscious. If the team realizes that the IV is compromised after that point, Haeberlin

No Monitoring. No one on the execution team examines the IV site for problems after the IV is inserted. *Id.* 977. Because the IV team leaves the execution chamber before the chemicals are injected, the Warden and a Deputy are the only officials in the room with the inmate. *Id.* 977-78, 328-29, 276. But even they are too far away from the inmate to observe IV problems, and are unqualified to make medical assessments in all events. *See supra* pages 16 to 17. And while the executioner is expected to determine from the control room whether the drugs are being injected into the vein by the feel of the syringe, he has no experience or training in “sensing how much resistance there is to the injection of the fluid.” JA 462-63.

Moreover, Kentucky makes no meaningful effort to monitor the inmate to ensure that he or she is unconscious throughout the execution. This is a particularly dangerous omission given the paralyzing effect of pancuronium. The testimony was undisputed that effective monitoring requires trained personnel to monitor the inmate from the same room, aided by machines, such as an EKG machine, BIS Monitor, EEG machine, or a blood pressure cuff. *Id.* 420-23, 602. The DOC does not use trained personnel to monitor anesthetic depth, or provide equipment designed to aid in that assessment. *Id.* 764.

would instruct them to continue with the backup IV line, JA 279-80, 318 – without first administering any additional thiopental to ensure the necessary general anesthesia.

No Execution Training. Execution team members are not given special training to perform executions, except for a monthly practice session that involves setting practice IVs into other team members. *Id.* 190, 984. Execution personnel do not rehearse responses to problems that could occur during executions, or practice preparing the thiopental and loading them into syringes. Nor are they given any instruction on the effects of the drugs.

3. The Experience Of Other States With Execution Procedures Like Kentucky.

Having performed only one execution since Kentucky adopted lethal injection in 1998, Kentucky's execution personnel do not have an extensive track record of implementing the three-drug protocol. The experience of other States that perform executions more frequently, such as Missouri, Florida, Ohio, Tennessee, and California, reveals that procedural deficiencies very similar to those in Kentucky have led directly to botched executions and insufficient induction of general anesthesia. Their experience demonstrates that the combination of the dangerous three-drug protocol with complex administration procedures and poorly trained personnel renders foreseeable errors and botched executions inevitable over time.

The most recent example is Florida's execution of Angel Diaz. The execution personnel inserted both the primary and backup IVs improperly, and both catheters perforated Diaz's veins. The infiltration occurred even though the personnel saw the flash of blood that the Kentucky protocol describes as the

appropriate indicator of catheter reliability. *See* Summary of the Findings of the Dep't of Corrections Task Force Regarding the Dec. 13, 2006 Execution of Angel Diaz, at 5 (Dec. 20, 2006) ("Diaz Findings"). The execution team, injecting the drugs from another room as in Kentucky, attempted to inject the thiopental into the first IV. When they experienced difficulty injecting the dose, they switched to the second IV and injected the pancuronium and potassium, *id.* – precisely what Warden Haerberlin testified he would do in this situation, JA 279-80, 318. As a result, Diaz apparently received an inadequate dose of thiopental, and exhibited the gasping behavior consistent with partial paralysis from the pancuronium until he died 34 minutes later. Proceedings of the Governor's Comm'n on Lethal Injection, at 97-98, 101 (Feb. 12, 2007). Despite these difficulties, the execution team continued to attempt to push additional doses of each of the drugs into the two infiltrated IVs. *See* Diaz Findings, at 5. An autopsy revealed 12-inch chemical burns on each arm where the drugs were injected into the tissue surrounding the vein. *See* The Governor's Comm'n on Administration of Lethal Injection, II Record of Proceedings: Comm'n Meeting Packets (Feb. 12, 2007) (Postmortem Exam of Angel Diaz, at 1). As in Kentucky, at least one team member was present in the chamber with Diaz, but no team members noticed any signs of the infiltration that occurred, and no team members knew how to react when the first IV became compromised. *See* Diaz Findings at 5.

Similarly, during the Ohio execution of Joseph Clark, execution team members who, like Kentucky team members, had paramedic-level training, were unable to place reliable IVs. JA 785. After the execution began, Clark sat up and said “It don’t work.” Execution team members then closed the curtains and spent 40 minutes attempting to re-place the IVs, as Clark moaned from behind the curtains. JA 782, 790. Ninety minutes after the execution process began, the curtains opened to reveal Clark dead. JA 787.

California has employed execution personnel who are substantially more qualified than those used in Kentucky – a combination of registered nurses and EMTs, as well as a doctor observing the process and recording vital signs – but nevertheless has experienced six aberrant executions among the eleven that it has performed by lethal injection. *Morales v. Tilton*, 465 F. Supp. 2d 972, 975 (N.D. Cal. 2006). As in Kentucky, team members did little training for executions, and never practiced mixing the thiopental. *Id.* at 979 & n.7. As a result, the registered nurses – who, like EMTs and phlebotomists, do not prepare IV anesthetics as part of their daily responsibilities – became confused while preparing the thiopental dose, and were unable to follow the directions on the thiopental packaging. *Id.* at 980. The nurses failed to set a backup IV line in at least one execution. Despite awareness of the problem, the execution personnel’s only response was “sh-t does happen,” and the execution proceeded. *Id.* at 979 & n.8. That execution took far longer than usual and the inmate exhibited signs consistent with

insufficient anesthesia. *Morales v. Hickman*, 415 F. Supp. 2d 1037, 1045 & n.13 (N.D. Cal. 2006), *aff'd per curiam*, 438 F.3d 926 (9th Cir.), *cert. denied*, 546 U.S. 1163 (2006). Several other executed inmates continued to breathe for far longer than they should have if they had received the full dose of thiopental. But the observing doctor and nurses, untrained in anesthesia, did not recognize the significance of the continued breathing. *Morales*, 465 F. Supp. 2d at 975.

Similar problems have plagued Missouri, where prison officials delegated complete responsibility for the execution procedures to a board-certified surgeon. Missouri officials testified that they relied on the medical expertise of the surgeon – expertise they assumed he must have, just as Kentucky officials have made assumptions about the EMT and phlebotomist. *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*. The surgeon, who was unfamiliar with the preparation of thiopental, prepared doses of the anesthetic that were significantly lower than the intended dose. *Id.* Because the inmates were given pancuronium, there is no way to know, after the fact, whether they received doses of anesthetic sufficient to render them unconscious.

Finally, in Tennessee, the certified paramedic technicians who are responsible for setting the catheters and who are the only medically trained personnel used in the execution were ignorant of the many problems that can arise when injecting intravenous anesthetics. A court found that this lack

of knowledge, together with the lack of additional training led to the paramedics being “completely unprepared” to perform “the actions they are actually charged with performing.” *Harbison*, 2007 WL 2821230, at *3. And, like Warden Haeblerin, Tennessee’s personnel were unaware that a flash of blood in an IV is an unreliable indicator of a successful insertion. *Id.* at *17. The court further found that the execution team’s remote observation of the inmate through closed-circuit television was insufficient, particularly because infiltration can elude visual observation. *Id.* at *19. These and other failures in the procedures, the court concluded, amounted to a “guarantee” that some executions would be performed improperly. *Id.* at *18.

4. Less Dangerous Alternatives.

Petitioners presented substantial un rebutted evidence at trial that alternative means of accomplishing lethal injection “would carry a much lower risk of causing pain or suffering, much lower risk of an error in administration, much, much lower risk of things going wrong.” JA 462. The DOC did not dispute that these alternatives exist, or that they would lessen the danger of pain. To the contrary, the DOC’s expert agreed. *Id.* 627-28.

Because each of the drugs in the three-drug formula is independently lethal, *id.* 492, 547, pancuronium and potassium could be omitted, thus eliminating the danger of conscious asphyxiation and excruciating pain. *Id.* 445-46. The resulting protocol, using thiopental (or another barbiturate) as the sole lethal agent, would be far less sensitive to

error, and would allow any injection errors to be detected and corrected without subjecting the inmate to extreme suffering. *Id.* 462. The DOC's expert, Dr. Dershwitz, has even suggested elsewhere that executing by means of an overdose of a barbiturate – the same method used to euthanize animals – would significantly lessen the risk of inhumane executions. *See Harbison*, 2007 WL 2821230, at *3.¹²

Alternatively, the dangers arising from deficient administration could be reduced by monitoring the inmate's anesthetic depth throughout the execution. JA 422-23. Although pancuronium hides evidence of consciousness, *id.* 418, personnel qualified to monitor anesthetic depth, using appropriate equipment, would be able to ensure that corrective measures are taken if the inmate is not adequately anesthetized. *Id.* 418-23, 438-40.

D. Procedural History Of This Action.

Petitioners filed this action in the Franklin Circuit Court on August 9, 2004 challenging the chemicals and procedures Kentucky uses to carry out lethal injection. *Id.* 10. Petitioners were granted only limited discovery, and were not allowed to depose members of Kentucky's execution team. Tr. 195, 1248. At trial, Petitioners presented testimony from 18 witnesses, including an expert anesthesiologist, the Commissioner of the Kentucky Department of Corrections, and a variety of other

¹² Veterinarians use a long-acting barbiturate, pentobarbital, as the predominant means of animal euthanasia because of its simplicity and humaneness. JA 457-58.

prison officials who had first-hand experience with the execution process. The Commonwealth presented testimony from two witnesses: the Commissioner and an anesthesiologist.

On July 8, 2005, the trial court entered an order upholding Kentucky's lethal injection statute. JA 754. As an initial matter, the trial court found that Kentucky "did not conduct any scientific or medical studies or consult any medical professionals concerning the drugs and dosages to be injected into the condemned." *Id.* 760. It then addressed only two claims of maladministration, finding that there was a "minimal risk" that the drugs would be mixed improperly, and that the executioners would have only "minor difficulty" in locating a vein. *Id.* 761-62. It made no findings concerning the training of execution team members, the appropriateness of Kentucky's IV system (which requires the executioner to be in a separate room from the inmate), or the adequacy of Kentucky's monitoring to ensure that the condemned prisoner is adequately anesthetized.

The trial court held that the Eighth Amendment required Petitioners to demonstrate a "substantial risk of wanton and unnecessary infliction of pain." *Id.* 759. The court found this standard unsatisfied, concluding that Petitioners had "not demonstrated by a preponderance of the evidence that Kentucky's method of execution by lethal injection inflicts unnecessary physical pain," and that the "Eighth Amendment [does] not provide protection against *all* pain, only cruel and unusual pain." *Id.* 766.

Petitioners appealed to the Supreme Court of Kentucky. In discussing the Eighth Amendment standard, the court stated: “The method of execution must not create a substantial risk of wanton or unnecessary infliction of pain, torture or lingering death,” and “the prohibition against cruel punishment does not require a complete absence of pain.” *Id.* 800, 805, 807. The court recognized that “conflicting medical testimony prevents us from stating categorically that a prisoner feels no pain,” *id.* 807, but apparently found that a “substantial risk” of pain was not present. The court therefore concluded that “[t]he lethal injection method used in Kentucky is not a violation of the Eighth Amendment to the United States Constitution.” *Id.*

SUMMARY OF ARGUMENT

The Eighth Amendment prohibits the “unnecessary and wanton infliction of pain.” *Gregg v. Georgia*, 428 U.S. 153, 173 (1976). In the capital punishment context, the Eighth Amendment’s prohibition on the “gratuitous infliction of suffering,” *id.* at 183, requires States to avoid inflicting more pain than is necessary to cause death.

This prohibition applies fully to the manner in which a government carries out executions, not merely to its choice of particular execution methods. Even an execution method such as lethal injection that is humane in theory can be carried out by means of flawed or haphazard procedures that create a foreseeable danger of inflicting severe pain in actual practice. Performed repeatedly over time in the absence of adequate safeguards, such a method

of execution will inevitably involve the infliction of gratuitous pain in some executions. Inflicting gratuitous pain on a subset of condemned prisoners is no more tolerable than inflicting gratuitous pain on all condemned prisoners. A State therefore violates the Eighth Amendment when its execution procedures create a significant and unnecessary risk of inflicting severe pain that could be prevented by the adoption of reasonable safeguards.

Kentucky's three-drug lethal injection protocol violates this bedrock Eighth Amendment requirement. It is undisputed that a condemned prisoner injected with pancuronium and potassium will suffer torturous pain and agonizing death if the prisoner has not been properly anesthetized – but will be unable to alert anyone to this suffering, and will appear serene and comfortable to the executioners and other observers while enduring an excruciating death. It is also undisputed that Kentucky could easily eliminate the risk of such suffering by forgoing the use of pancuronium and potassium, and relying instead on a lethal dose of an anesthetic such as thiopental or pentobarbital – which will produce death in a matter of minutes. The Commonwealth was unable to identify any legitimate penological justification for persisting in the use of the three-drug formula – or even for its refusal to take the alternative step of monitoring the anesthetic depth of executed prisoners.

Kentucky's ill-considered and haphazard lethal injection procedures exacerbate the risk that some condemned prisoners will suffer an excruciating death. At each step, execution personnel are

required to perform complicated tasks for which they have no expertise or training. The IV team must mix thiopental from multiple kits, calculate the appropriate dose, and load it into syringes. The protocol requires the warden to use an unreliable method to determine which IV site to use, and neither he nor any other member of the execution team is qualified or situated to discern signs of consciousness which would signal that the inmate is undergoing a torturous death. The executioner injects the drugs from a remote location, determining by feel alone, and without practice, whether the injection is working. The physical layout of the execution chamber makes monitoring the catheter sites nearly impossible and renders injection errors more likely. There is no effective observation of the inmate, much less monitoring of anesthetic depth. Nor does the team train for the many foreseeable problems that have occurred in other States.

In the face of this evidence, the courts below erred in upholding Kentucky's lethal injection procedures. In particular, both the Kentucky Supreme Court and the trial court erred in holding that it was irrelevant that the Commonwealth had alternative means readily available which would eliminate the risk of gratuitous and severe pain without compromising any valid penological interests. In view of the severity of the pain risked and the ease with which it could be avoided, Petitioners should not have been required to show a high likelihood that they would suffer such pain in order to make out an Eighth Amendment violation. In this regard, the Kentucky courts further erred in focusing myopically on the

probability that Petitioners themselves would suffer an agonizing death. The proper question is whether repeated executions using the three-drug formula and Kentucky's inadequate procedures would produce torturous deaths in at least some cases. The answer to that question is plainly yes.

Therefore, this Court should reverse.

ARGUMENT

I. The Eighth Amendment Prohibits Execution Procedures That Involve An Unnecessary Risk of Excruciating Pain.

This Court has long recognized that the “evil[] of most immediate concern to ... the [Eighth] Amendment,” *Estelle v. Gamble*, 429 U.S. 97, 103 (1976), is the infliction of “unnecessary” pain in the course of carrying out a death sentence, *Kemmler*, 136 U.S. at 447. “By protecting even those convicted of heinous crimes, the Eighth Amendment reaffirms the duty of the government to respect the dignity of all persons.” *Roper v. Simmons*, 543 U.S. 551, 560 (2005).

Although the methods of execution that most concerned the Framers involved mutilation and other barbarous practices, the Eighth Amendment was never “intended to ... prevent only an exact repetition of history.” *Weems v. United States*, 217 U.S. 349, 373 (1910). Rather, “[t]he prohibition against ‘cruel and unusual punishments, like other expansive language in the Constitution, must be interpreted according to its text, by considering history, tradition and precedent, and with due regard for its purpose and function in the constitutional

design. *Simmons*, 543 U.S. at 560. “To implement this framework,” the Court has “established the propriety and affirmed the necessity of referring to ‘evolving standards of decency that mark the progress of a maturing society’” to determine when punishments exceed constitutional limits. *Id.* at 560-61 (quoting *Trop v. Dulles*, 356 U.S. 86, 100-01 (1958) (plurality opinion)).

Advancements in science have made it possible to carry out a death sentence in a nearly painless manner. And the States that impose death sentences have, with near unanimity, adopted lethal injection in order to make executions painless to the condemned person. The Eighth Amendment’s prohibition on the infliction of gratuitous pain would be meaningless, however, if it did not extend to methods of execution that, if performed properly, are humane and constitutional, but that are bound to inflict severe pain when insufficient care is taken to assure that they are indeed performed properly.

When a government chooses a method of execution that is highly vulnerable to multiple errors, any one of which will result in the infliction of agonizing pain, it incurs an Eighth Amendment obligation to provide adequate, practicable safeguards against those errors. This is the inescapable implication of the Amendment’s command that the punishments adopted by American governments “must not involve the unnecessary and wanton infliction of pain.” *Gregg*, 428 U.S. at 173 (plurality opinion). By choosing procedures that inevitably involve the infliction of gratuitous pain in some executions, they disregard the “principle of civilized treatment

guaranteed by the Eighth Amendment.” *Trop v. Dulles*, 356 U.S. 86, 99 (1958) (plurality opinion). Therefore, a method of execution is administered unconstitutionally if the procedures in question impose a significant and unnecessary risk of severe pain that could be prevented by the adoption of reasonable safeguards or alternative procedures.

A. The Eighth Amendment Prohibits Punishments That Involve “Unnecessary Cruelty.”

The Eighth Amendment requires the States, in carrying out death sentences, to avoid inflicting pain beyond what is necessary to cause death. This Court first considered the constitutionality of a method of execution in the late 19th century, and since then, it has consistently held that the Eighth Amendment prohibits punishments that involve unnecessary pain. In *Wilkinson v. Utah*, 99 U.S. 130, 135-36 (1878), the Court stated that “it is safe to affirm that punishments of torture, such as those mentioned by the commentator referred to, and all others in the same line of unnecessary cruelty, are forbidden by that amendment to the Constitution.” The Court elaborated the prohibition in *In re Kemmler*, explaining that “[p]unishments are cruel when they involve torture or a lingering death [The Amendment] implies ... something inhuman and barbarous, something more than the mere extinguishment of life.” 136 U.S. at 447; *see also Weems*, 217 U.S. at 409 (White, J., dissenting) (“that word [cruel] manifestly was intended to forbid the resort to barbarous and unnecessary methods of

bodily torture in executing even the penalty of death”).

In more modern formulations, the Court has continued to rely on the concept of “unnecessary” pain, stating that “[t]he traditional humanity of modern Anglo-American law forbids the infliction of unnecessary pain in the execution of the death sentence.” *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 463 (1947). In its most recent restatement, the Court explained that “the punishment must not involve the unnecessary and wanton infliction of pain.” *Gregg*, 428 U.S. at 173 (plurality opinion) (citing *Weems* and *Wilkerson*).

Because the Eighth Amendment “is not fastened to the obsolete but may acquire meaning as public opinion becomes enlightened by a humane justice,” *Weems*, 217 U.S. at 377, the prohibition on methods of execution that “involve the unnecessary and wanton infliction of pain” is not static in scope or fixed to specific practices. Rather, whether a method involves “unnecessary pain” must be determined in light of “the evolving standards of decency that mark the progress of a maturing society,” *Simmons*, 543 U.S. at 561 (quotation marks omitted), as well as the means available to “extinguish[] life humanely,” *Resweber*, 329 U.S. at 464 (plurality opinion). The *Gregg* Court explicitly noted the evolving nature of what constitutes “unnecessary pain,” invoking Justice Powell’s discussion in *Furman v. Georgia* of execution methods. *Gregg*, 428 U.S. at 171 (citing *Furman v. Georgia*, 408 U.S. 238, 429-430 (1972) (Powell, J., dissenting, joined by Burger, C.J., and Blackmun and Rehnquist, JJ.)). In *Furman*, Justice

Powell, joined by three other Justices, reasoned that methods of execution that were “tolerate[d]” at the time of the founding would be enjoined as unconstitutional today, because “no court would approve any method of implementation of the death sentence found to involve unnecessary cruelty *in light of presently available alternatives.*” 408 U.S. 238, 430 (1972) (Powell, J., dissenting) (emphasis added). Determining whether a method of execution involves unnecessary cruelty, in turn, “would call for a discriminating evaluation of [the] particular means” of execution, *id.*, in light of the amount of pain inflicted, whether civilized society could “tolerate” the imposition of such pain, and the ability to prevent that pain by adopting “presently available alternatives.”

B. States Must Administer Their Execution Procedures In A Manner That Does Not Involve Unnecessary Pain.

A corollary to the prohibition of execution methods that involve unnecessary pain is that governments must carry out executions in a *manner* that avoids the needless infliction of pain. The guarantee of an execution free from unnecessary pain would be illusory if the Constitution permitted a theoretically humane method to be implemented in a manner that inflicted excruciating pain in practice. *Bethea v. Crouse*, 417 F.2d 504, 507-08 (10th Cir. 1969) (citing *Resweber* as standing for the proposition that “[c]ruel and unusual punishment may be inflicted by ... the inhumane execution of a permissible penalty”).

This obligation applies equally when a government chooses a method of execution that is not inherently inhumane if it is performed properly, but that will involve severe pain if performed improperly. When a method of execution is administered in a flawed manner that creates a foreseeable danger of inflicting severe pain, that method, performed repeatedly over time, *will inflict* unnecessary pain on a subset of executed inmates. The foreseeable infliction of unnecessary pain on *some* condemned inmates cannot be any more tolerable under the Eighth Amendment than the infliction of unnecessary pain on *all* condemned inmates. Execution procedures that foreseeably inflict severe but preventable pain conflict with the essential values the Eighth Amendment seeks to preserve. Therefore, the Eighth Amendment obligates the government to carry out executions in a manner that avoids creating an unnecessary risk of pain with respect to individual inmates.

A plurality of this Court acknowledged this obligation in *Resweber*, stating that “we ... assume that the state officials carried out their [execution] duties ... *in a careful and humane manner.*” 329 U.S. at 462 (emphasis added). To be sure, the Eighth Amendment does not require States to prevent accidents that occur even though prison officials acted with appropriate care – in other words, accidents “for which no man is to blame.” *Id.* But it does require prison officials to act “in a careful and humane manner” to minimize foreseeable risks of severe pain. *Id.* Thus, as Justice Frankfurter suggested in his decisive concurrence in *Resweber*,

while an “innocent misadventure,” *id.* at 470, did not render Francis’s execution unconstitutional, “a hypothetical situation, which assumes a series of abortive attempts at electrocution ... would ... raise different questions.” *Id.* at 471. A State’s unjustified failure to minimize the danger of severe pain created by its execution procedures will foreseeably result in botched executions, thereby predictably inflicting suffering on the affected inmates. Such failure “involve[s] the unnecessary and wanton infliction of pain.”¹³ *Gregg*, 428 U.S. at 173 (plurality opinion)

C. Numerous Lower Courts Have Held That Unnecessary Risks Of Pain Are Unconstitutional.

Although this Court’s precedents recognize that *how* an execution is carried out is constitutionally relevant, the Court has never had occasion to articulate the precise standard that governs such an analysis. The lower courts have grappled with these issues in light of the widespread evidence of maladministration of lethal injection. Many of these courts have interpreted *Gregg*’s prohibition on

¹³ Several federal and state courts have recognized the obligation to exercise proper care to ensure that executions are performed humanely. See, e.g., *Campbell v. Wood*, 18 F.3d 662, 687 & n.17 (9th Cir. 1994) (execution procedure constitutional because “risk [of pain] has been minimized as much as possible”); *Bethea v. Crouse*, 417 F.2d 504, 507-08 (10th Cir. 1969) (Constitution does not permit inhumane implementation of theoretically humane punishment); *Malicoat v. State*, 137 P.3d 1234, 1237 (Okla. Crim. App. 2006) (execution procedures constitutional if State takes “appropriate precautions and rel[ies] upon adequate training, skill, and care in doing the job”).

punishments that “involve the unnecessary and wanton infliction of pain” to prohibit execution procedures that involve an “unnecessary risk” of pain.

For instance, in *Morales v. Tilton*, the district court framed the constitutional question as whether “California’s lethal-injection protocol – as actually administered in practice – create[s] an undue and *unnecessary risk* that an inmate will suffer pain so extreme that it offends the Eighth Amendment.” 465 F. Supp. 2d at 974 (emphasis added); *see also Cooper v. Rimmer*, 379 F.3d 1029, 1033 (9th Cir. 2004) (a plaintiff must show an “unnecessary risk of unconstitutional pain or suffering”). Applying this analysis, the district court found that California’s procedures were unconstitutional because (1) the amount of pain involved if the procedures were implemented improperly would be “unconscionable”; (2) the procedures suffered from severe deficiencies that “resulted in an undue and unnecessary risk of an Eighth Amendment violation”; and (3) these risks would be preventable through the application of an “appropriate degree of care and professionalism.” *Morales*, 465 F. Supp. 2d at 977, 974, 981-83.

Other courts have similarly held that plaintiffs can prevail by demonstrating that lethal injection procedures subject them to an unnecessary risk of severe pain. *See, e.g., Coe v. Taft*, No. 2:04-CV-1156, 2007 WL 2607583, at *4 (S.D. Ohio Sept. 5, 2007) (stating that the “flaws” in the execution procedures that created an “unacceptable and unnecessary ... risk of violating the Eighth Amendment[] ... are readily fixable”); *Brown v. Beck*,

No. 06 CT 3018, 2006 WL 3914717, at *8 (E.D.N.C. Apr. 7, 2006); *Evans v. Saar*, 412 F. Supp. 2d 519, 524 (D. Md. 2006) (“A court must inquire whether an inmate facing execution has shown that he is subject to an unnecessary risk of unconstitutional pain or suffering”) (internal quotation marks omitted); *see also LaGrand v. Stewart*, 173 F.3d 1144, 1148-49 (9th Cir. 1999). These courts have determined that the “unnecessary risk” standard provides a workable framework for evaluating the evidence of improper administration of execution procedures in light of the long-standing prohibition on the infliction of unnecessary pain.

D. The Eighth Amendment Requires States To Remedy Significant And Unnecessary Risks of Severe Pain.

The unnecessary risk analysis is a straightforward one that evaluates the risk in the context in which it arises. The analysis must include an assessment of (a) the severity of pain risked, (b) the likelihood of that pain occurring, and (c) the extent to which alternative means are feasible, either by modifying existing execution procedures or adopting alternative procedures. An execution procedure creates unnecessary risk where, taken as a whole, it presents a significant risk of causing severe pain that could be avoided through the use of a reasonably available alternative or safeguard.

The unnecessary risk standard is grounded in common sense – States should not be allowed needlessly to engage in practices that risk substantial and gratuitous pain – but it also flows

from the Eighth Amendment principles articulated in *Roper v. Simmons* and the other precedent discussed above. Today, nearly every State that carries out the death penalty requires an anesthetized death. *See supra* page 7 (noting that lethal injection is used in every State that has the death penalty save one). Electrocutions, hangings and gassings have all but disappeared in practice, and have been formally abolished in many States. *See supra* pages 2 to 4. Thus, there is today an undeniable “national consensus” that executions must be essentially painless. *Simmons*, 543 U.S. at 564. Not every State has lived up to this standard in practice. But the widespread adoption of lethal injection demonstrates that “contemporary standards of decency” require an anesthetized death. *Id.* at 562.

A lethal injection process that creates a significant and avoidable risk that an inmate will suffer severe pain is inconsistent with those contemporary standards of decency. Or put in the converse, contemporary standards of decency do not allow a State to ignore a significant and unnecessary risk that its chosen method of execution will cause severe pain.

The unnecessary risk standard requires a proper measure of care, but does not require a State to eliminate every risk, no matter how small and unpredictable. An insignificant and unforeseeable risk, particularly where the harm is minor and/or difficult to remedy, will not violate the Constitution. Thus, a “latent” problem with Louisiana’s electrocution equipment, discernable only after the

switch was flipped, was the type of “unforeseeable accident” for which “no man is to blame,” and did not violate the Eighth Amendment. *Resweber*, 329 U.S. at 460, 462, 464. That type of freak, unforeseeable occurrence does not represent an unnecessary risk for Eighth Amendment purposes.

Likewise, it should be plain that the unnecessary risk standard takes into account appropriate penological considerations. Most importantly, a legally cognizable risk is one that is reasonably avoidable. If a risk can be avoided only by taking extreme or unreasonable measures, then it will not fall in the category of an unnecessary risk. However, the greater the magnitude of pain, and the greater the likelihood of that pain, the greater the justification must be for not adopting safer alternative means. Where there is a significant risk of severe pain that could be avoided through alternative means, the penological grounds for failing to adopt an alternative must be compelling to find that the risk is necessary. In addition, where multiple acceptable alternatives exist to remedy a needlessly risky procedure, it is appropriate to seek input from the State as to which alternative can be most easily implemented. *See Morales*, 415 F. Supp. 2d at 1047 (offering California several choices in remedying its lethal injection protocol).

In sum, where a State has chosen to adopt procedures that create a significant risk of severe pain, the State is obligated to regulate its procedures so as to abate that risk.

II. Kentucky's Procedures Subject Inmates To An Unnecessary Risk Of Excruciating Pain.

A. The Kentucky Courts Failed To Apply The Proper Constitutional Test.

Although the unnecessary risk test derived from *Gregg* and its predecessors is a straightforward and commonsensical test, the Kentucky courts did not apply it. Instead, they erred in two important ways. First, they held that Eighth Amendment protects against only "substantial" risks rather than unnecessary ones. JA 759, 800. Second, they failed to consider the copious record evidence demonstrating the magnitude and nature of the risk imposed by Kentucky's lethal injection process, and the severity of the pain arising from that risk. JA 760-65.

1. The Kentucky Courts Applied The Wrong Standard.

The Kentucky Supreme Court's decision in this case cannot be squared with Eighth Amendment precedents, discussed above. Applying the "substantial risk" test, the courts below evaluated only the quantum of risk without consideration of the degree of pain at issue or the availability of alternatives. Indeed, the trial court held that the availability of less painful alternatives was irrelevant because Petitioners had not shown a substantial risk. In sharp contrast to the acontextual approach of the courts below, the unnecessary risk test looks at both the quantum of risk and the quantum of pain involved, as well as the availability of alternative methods to avoid the risk.

The higher the quantum of pain, and the more feasible the alternatives, the lower the degree of risk that can be tolerated as necessary (although that risk must always be at least significant, as described above). Thus, where the pain in question is severe and there is a reasonably available alternative, even a degree of risk that cannot be quantified as “substantial” will be an unnecessary risk.¹⁴

Moreover, the courts below were able to characterize the risk as insubstantial – and therefore constitutionally acceptable – only by myopically focusing on Petitioners’ individual executions considered in isolation from the inevitable consequences of the repeated use of the protocol being used to execute them. The Kentucky courts failed to consider the degree to which even a risk that appears relatively small with respect to any individual execution would result in a number of botched and inhumane executions as the procedures are employed repeatedly over time to execute hundreds or thousands of condemned prisoners. Whether a risk of pain is constitutionally permissible must be considered in light of the extent to which unnecessary severe pain may be inflicted on inmates in the aggregate, such that the procedures “involve the unnecessary and wanton infliction of pain” over time. *Gregg*, 428 U.S. at 173 (plurality opinion). In failing to conduct this analysis, the courts below took an unduly cramped view of whether the risks created

¹⁴ Regardless, Petitioners’ evidence, discussed below, demonstrated not just a significant but a substantial risk of pain. *See infra* pages 43 to 50.

by the Kentucky procedure are sufficient to be constitutionally cognizable.

2. The Kentucky Courts Failed To Analyze The Evidence As A Whole.

The Kentucky courts also fell short by failing to consider all of the evidence of the numerous deficiencies in Kentucky's procedures. The question whether a State's execution procedures create an unnecessary risk of pain requires consideration of the cumulative risk created by all of the individual deficiencies in the procedures. In other words, the question is not, as the Kentucky courts framed it, the degree of risk that an individual problem will occur – such as improper preparation of the drugs or an infiltrated IV – but the degree of risk of severe pain caused by the cumulative effect of all of the deficiencies, combined with the danger created by the use of personnel who are unequipped to prevent or correct these foreseeable problems. *Morales*, 465 F. Supp. 2d at 979-81. The lower courts failed to undertake this analysis, considering in isolation only two of the foreseeable problems that could arise due to deficiencies in Kentucky's procedures, and ignoring much of the evidence in the record regarding the numerous other failures in Kentucky's procedures.

B. This Court Should Find That Kentucky's Procedures Expose Inmates To An Unnecessary Risk Of Excruciating Pain.

The record evidence demonstrates that Kentucky's procedures create an unnecessary risk of excruciating pain. Both pancuronium and

potassium cause extreme suffering if administered without proper anesthesia; thus, Kentucky's procedure depends upon successful injection of thiopental. Yet the Commonwealth has set up a system with little margin for error, in which small but predictable missteps in administration will produce extreme suffering.

Rather than addressing the dangers created by the three-drug formula or determining whether less dangerous alternatives were available, Kentucky blindly adopted this method of execution and doggedly refuses to alter it despite mounting evidence of its risks. At the same time, the Commonwealth has created an administration system that, rather than minimizing the risks posed by the procedure, increases the danger of error through its needless complexity. And it has failed to use qualified personnel to carry it out.

The dangers inherent in Kentucky's procedure – dangers that are both well-known and well-documented – leave no doubt that, if not corrected, its method of execution will cause excruciating pain to some executed persons. These risks are both significant and unnecessary. Accordingly, Kentucky's lethal injection protocol and the methods adopted to administer it violate the Eighth Amendment.

- 1. Kentucky Has Chosen To Employ Dangerous Drugs That Involve A Risk of Excruciating Pain.**

Kentucky has chosen to employ two drugs that together render the protocol extremely sensitive to

error, with even minor errors leading to catastrophic consequences. As discussed above, the injection of potassium into an individual who is not deeply anesthetized will cause excruciating pain. JA 443-44, 600, 626. In addition, a conscious individual given pancuronium would appear peaceful and relaxed, even while experiencing the terror and agony of conscious suffocation. *Id.* 417, 437, 624-26. In combination, the two drugs give rise to the danger that even if inmates are insufficiently anesthetized and consequently experience the pain of potassium, all evidence of that suffering will go completely unnoticed and uncorrected. *Id.* 441.

2. Kentucky Has Developed Drug Administration Procedures That Make Inadequate Anesthesia Likely.

Because pancuronium and potassium will inflict horrendous suffering on a person who is not properly anesthetized, Kentucky's lethal injection protocol depends on the successful administration of thiopental. Kentucky has exacerbated the danger inherent in its choice of drugs by relying on haphazard, convoluted procedures and employing unqualified personnel to implement them. Had the lower courts examined the record evidence of Kentucky's procedures as a whole, it would have been evident that the combination of needlessly complex procedures and unprepared personnel is a disaster waiting to happen.

Kentucky's method of preparing and injecting the drugs is complicated and prone to error at each step of the procedure. *First*, the DOC allows individuals

to prepare the thiopental dose even though they have no training or experience in doing so. *Id.* 528-29. Untrained personnel are likely to struggle to calculate and prepare the correct dose, resulting in substantial uncertainty as to whether an adequate dose was actually prepared. *Id.* 434, 532. This problem is exacerbated by the protocol's failure to set forth the desired volume and concentration of thiopental. *Id.* 472-73. Although the lower courts did not address this danger, other States' use of inadequately qualified personnel to prepare the thiopental has repeatedly resulted in incorrect, and potentially inadequate, doses of thiopental. *See, e.g., Morales*, 465 F. Supp. 2d at 980 (registered nurses' "admitted failure" to properly prepare thiopental created doubts as to "whether inmates ... have been sufficiently anesthetized"); *Taylor*, 2006 WL 1779035, at *5, *7 (expressing concern that the "physician who is solely responsible for correctly mixing the drugs" admitted confusion and inability to mix full dose of thiopental, in part because he had no anesthesia training).

Second, the DOC's procedures for IV insertion create a likelihood of problems, such as infiltration and improperly connected catheters. Although EMTs and phlebotomists are qualified to insert IVs, they are unequipped to do so for persons into whom peripheral IVs cannot be easily inserted. JA 517. It is often difficult to insert peripheral IVs in prisoners, because many have compromised veins from drug use. *Id.* 359, 772; *see also Beardslee*, 395 F.3d at 1074. These inmates foreseeably may require central line catheters, which would prevent the risks

of using compromised peripheral veins. *See* Trial Tr. 138-40, *Evans v. Saar*, 06-149 (D. Md. October 11, 2006) (testimony from Dr. Dershwitz that the inability to undertake central line insertion creates a significant risk of unreliable IV access). The DOC, however, has no plan for inserting central lines, and no execution personnel who would have the training to do so. JA 285, 463 476-78. Instead, DOC officials force execution personnel to attempt to place two IV catheters – a primary and a backup – for up to an hour. JA 975-76. Using a peripheral IV inserted after more than ten or fifteen minutes of unsuccessful attempts is dangerous because the IV is almost certain to be unreliable. *Id.* 475-76. The deficiencies in the DOC's IV procedures – regarding which the trial court made no findings – are particularly inexcusable in light of the fact that IV problems have led to prolonged inhumane lethal injection executions in other States. *See supra* pages 20 to 24.

Third, the Commonwealth has chosen to have its executioners administer the drugs from a separate room from which it is impossible to observe closely either the inmate or the catheter site. *Id.* 280. Execution personnel are thus extremely unlikely to detect any administration problems or signs of consciousness. Even though two DOC officials are present in the execution chamber itself, they do not know how to discern IV problems or verify the induction of general anesthesia. *Id.* 276, 340; *see also Harbison*, 2007 WL 2821230, at *17-*18 (crediting expert testimony that visual monitoring of catheter sites and inmates from a distance is

insufficient to detect IV problems, and only personnel with “daily experience” monitoring can do it effectively). Moreover, the drugs have to travel through many feet of IV line to reach the condemned inmate, and much of this line is not visible to the executioner pushing the drugs. JA 286-87. The only means of detecting IV problems would be to gauge the amount of resistance in the tubing, but the lay executioner does not have the training necessary to do so. JA 462-63. The potential for undetected IV problems is therefore significantly higher than if the drugs were administered from the bedside.

Fourth, the DOC’s reliance on personnel with little or no training or experience administering intravenous drugs increases the likelihood of administration errors. The only execution team members who have even minimal medical training (EMTs and phlebotomists) do not have the qualifications or training to carry out most tasks involved in the protocol. *See supra* pages 17 to 18; *Harbison*, 2007 WL 2821230, at *14-*18. Inevitably, serious errors arise when uninformed and untrained personnel are relied upon to administer the execution procedure. *See, e.g.*, JA 508-09 (explaining that often it is “errors in judgment” that are “the major cause” of mistakes in administering drugs); *Morales*, 465 F. Supp. 2d at 979. Moreover, EMTs and phlebotomists do not have the training or experience to react to foreseeable problems. JA 529-30; *see also supra* pages 17 to 18. Nor does the DOC provide any training on reacting to contingencies. JA 191, 318.

Despite all this, the warden and deputy warden who oversee executions testified that they would rely on the EMT and phlebotomist to solve any problems that arise. *Id.* 283, 337-38. Their dependence is unavoidable because neither official has the knowledge needed to detect problems. *Id.* 283 (warden “honestly [doesn’t] know what you’d look for” to discern signs of distress). The DOC’s reliance on its medical personnel would be appropriate and useful if those personnel were adequately qualified. But the DOC never verified that these personnel were qualified or capable of discharging their responsibilities in the execution procedure. *Id.* 279 (“given the gravity of the situation,” he “think[s]” the medical personnel would “know what to do”); *id.* 312 (IV team “probably” can mix drugs). Having failed to investigate the dangers of the procedure, DOC officials have no basis for assuming that execution personnel would “know what to do.” This unthinking reliance on personnel who have minimal relevant training is a needless failure that has resulted in execution problems in other States. *See Taylor*, 2006 WL 1779035, at *7 (noting officials’ deference to incompetent doctor).

In sum, the DOC’s procedures create a setting in which botched executions are not only possible but highly likely. As described *supra*, pages 20 to 24, deficiencies that are similar to those present in Kentucky have led to botched executions in those States that perform executions more frequently than does Kentucky.

3. Kentucky's Selection Of These Risky Procedures Was Ill-Considered.

The deficiencies in Kentucky's procedures are the predictable result of the haphazard manner in which the DOC adopted them. The officials who developed and implemented the procedures and who currently supervise the process "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, 139-42; 225-27. Rather, they simply aped the three-drug formula used in other States without inquiring into the dangerousness of the procedures, or even understanding the drugs or the need to induce anesthesia. *Id.* 760.

Similarly, DOC officials made decisions that require medical expertise – such as the dose of thiopental and the manner in which the IV will be inserted – without consulting any medically trained personnel. *Id.* 255-56, 289, 760-61. It is unsurprising that the results of the officials' uninformed decisionmaking process include the extremely dangerous neck catheterization disapproved by the DOC's own medical staff and found unconstitutional by the trial court, *id.* 762, 767; the ill-advised requirement that personnel will attempt to insert the IV line for an hour; and the convoluted process for remote delivery of the drugs. *Id.* 256, 286, 288-89, 359, 639, 976.

C. The Risk Kentucky's Procedures Create Is Reasonably Preventable Through The Adoption Of Available Alternatives.

The foreseeable risk that Kentucky's execution procedures will result in excruciating pain is an unnecessary risk, and therefore unconstitutional. The risk could be reasonably minimized by changing either the three-drug formula itself or the process of administering the drugs.

1. Removing Pancuronium And Potassium From The Execution Protocol Would Greatly Reduce The Risk Of Pain Without Compromising Penological Interests.

By omitting pancuronium and potassium and relying instead on a lethal dose of an anesthetic, the DOC would virtually eliminate the risk of pain. These facts were undisputed below, leading the trial court to note that "evidence was presented that other drugs were available" that would lessen the danger of severe pain. *Id.* 766. Moreover, there is no evidence that removing pancuronium and potassium from the protocol would compromise any legitimate penological interests.

It is undisputed that pancuronium is not a necessary component of the execution procedure. The drug is not given in order to cause the inmate's death, *id.* 443-44, 585, and it does not further the humaneness of the execution, *id.* 445. The Commonwealth presented no legitimate rationale for using pancuronium. As the trial court found, the Commonwealth's justification is aesthetic:

Pancuronium conceals “muscular movements in the condemned, involuntary or otherwise, that may result from the subsequent injection of [p]otassium.” JA 763; *see Beardslee*, 395 F.3d at 1075-76 & n.13 (stating that the State’s failure to “provide a single justification for the use of pancuronium,” and Dr. Dershwitz’s assertion of an aesthetic rationale for pancuronium, are, “to say the least, troubling”). Dr. Dershwitz asserted that the involuntary muscle movements sometimes caused by potassium “could be perceived by lay witnesses as suffering or discomfort.” JA 559-61. The trial court therefore concluded that the “use of [p]ancuronium ... in Kentucky’s lethal injection protocol serves no therapeutic purpose.” *Id.* 763.

The Commonwealth’s rationale for using pancuronium – whether couched as concern for the witnesses, or for the “dignity” of the inmate, *id.* 739-40 – is not legitimate. Pancuronium’s inclusion in the protocol virtually guarantees that prison personnel will be unable to detect any problems that are likely to occur, leaving the inmate to endure conscious suffocation and pain unbeknownst to observers. *Id.* 377, 441. Yet the DOC presented no evidence of any concrete harm that would justify imposing such a risk on condemned inmates. There is no evidence and no reason to think that witnesses would be injured by viewing any involuntary movements associated with death. Witnesses to electrocutions and gassings routinely observed seizures and other bodily movements. *See supra* pages 2 to 4. And one State, New Jersey, has determined that pancuronium is unnecessary, and

has opted to use only thiopental and potassium in its protocol. JA 109-10. In any event, the concern that witnesses may mistake unconscious movements for evidence of pain could be eliminated by informing them about the nature of the movements they might see. Thus, the danger to the inmate created by pancuronium could be avoided at little cost to the DOC.¹⁵

It was also undisputed that if potassium were removed from the protocol, the three-gram dose of thiopental would independently cause death. *Id.* 547. Thus, potassium too is unnecessary.

The Commonwealth presented no justification for its use of potassium apart from Dr. Dershwitz's suggestion that the speed with which potassium stops the heart is a positive attribute. *Id.* 627. But speed for its own sake is not a penological interest. The Commonwealth has not explained how its penological interests would be compromised if a few

¹⁵ The medical and veterinary communities have determined that it is never acceptable to administer a paralytic simply to protect the sensibilities of observers. The increased risk to the patient – even when trained veterinarians or physicians are present – cannot be justified by concerns that pet owners or family members may be upset by involuntary movements. JA 456-57; see *Concannon Br.*, *supra*, *Hill v. McDonough*, No. 05-8794, at 14-16 (S. Ct. 2006). See, e.g., Robert D. Truog et al., *Recommendations for end-of-life care in the intensive care unit: The Ethics Committee of the Society of Critical Care Medicine*, 29 *Crit. Care Med.* 2332, 2345 (2001) (use of paralytic for aesthetic purposes cannot “plausibly” be said to be for the benefit of the patient; “the best way to relieve [family’s] suffering [from seeing death movements] is by reassuring them of the patient’s comfort through the use of adequate sedation and analgesia”).

minutes were added to the duration of executions.¹⁶ Among the jurisdictions that employ the three-drug formula, the average duration of executions varies widely, from two or three minutes to over twenty minutes. *See, e.g.*, JA 496 (Kentucky execution of Eddie Harper took approximately five minutes); *Walker v. Johnson*, 448 F. Supp. 2d 719, 721 (E.D. Va. 2006); *Morales v. Hickman*, 415 F. Supp. 2d at 1044-46 & n.16. Clearly, then, penological interests do not require that otherwise painless executions be completed in less than two minutes.

The “speed” justification for potassium appears even more flimsy in view of the fact that Dr. Dershwitz admitted, and Petitioners’ experts agreed, that there are other cardiotoxic drugs that will stop the heart, *without causing pain*, “within a few minutes.” JA 628. The DOC’s failure to investigate, and refusal to consider these alternative drugs is inexplicable.

Although the Kentucky courts never addressed the viability of a barbiturate-only protocol, several other courts confronting lethal injection challenges have concluded that such a protocol would virtually eliminate the risk of pain. For instance, the district court, in *Morales v. Tilton* suggested that the State consider a barbiturate-only protocol, reasoning that

because the constitutional issues
presented by this case stem solely from

¹⁶ A DOC physician and the Commonwealth’s chief toxicologist testified that a three-gram dose of thiopental would cause death within three minutes to fifteen minutes. Tr. 656:16-18; *id.* 553:21-24.

the effects of pancuronium bromide and potassium chloride on a person who has not been properly anesthetized, removal of these drugs from the lethal-injection protocol, with the execution accomplished solely by an anesthetic, such as sodium pentobarbital, would eliminate any constitutional concerns, subject only to the implementation of adequate, verifiable procedures to ensure that the inmate actually receives a fatal dose of the anesthetic.

465 F. Supp. 2d at 983; 415 F. Supp. 2d at 1047 & n.16 (providing State with option of executing plaintiff by means of “thiopental or another barbiturate or combination of barbiturates”); *see also, e.g., Harbison*, 2007 WL 2821230, at *22-*23 (stating that barbiturate-only protocol “would have greatly mitigated the plaintiff’s risk of pain”); *Brown*, 2006 WL 3914717, at *2, *4 (discussing plaintiff’s request that North Carolina use a barbiturate protocol, and the *Morales* Court’s consideration of barbiturate-only protocol).

These courts’ opinions were informed by the very expert input that should have attended the development of the first lethal injection protocols in Kentucky and other States. *See, e.g., Morales*, 415 F. Supp. 2d at 1047 & n.16 (relying on testimony of both sides’ expert anesthesiologists regarding the relative risks of the barbiturate-only and three-drug protocols). Dr. Dershwitz, who defended Kentucky’s three-drug protocol in this case and now advises many jurisdictions regarding their execution

protocols, has recently begun recommending that jurisdictions adopt a barbiturate-only protocol. In Tennessee, for instance, the *Harbison* Court found that “Dr. Dershwitz recommended that the committee adopt a one-drug protocol which provided for the administration of 5 grams of sodium thiopental, ... and a waiting period of five minutes before the physician came in and confirmed death. Then, if the inmate were still alive, a second 5 gram dose of sodium thiopental could be administered.” *Harbison*, 2007 WL 2821230, at *3 (internal quotation marks omitted).

Moreover, the record in *Harbison* indicates that no substantial penological interests preclude the use of the barbiturate-only protocol. According to the Tennessee DOC, the advantages of a barbiturate-only execution are that “[a]ll physicians have agreed [there is] less chance of error”; it is simple; it is “[p]eaceful to witnesses”; it is “[s]imilar to animal euthanasia”; it “[e]liminates Pavulon & Potassium Chloride.” *Id.* at *3-*4. The only pragmatic disadvantage listed by the DOC was its belief that the protocol might involve a “potential longer time to pronounce death” in States that rely on EKG readings to pronounce death. *Id.* at *4. The DOC’s protocol revision committee was apparently not deterred by this possibility as it recommended that the State adopt the barbiturate-only protocol on the strength of Dershwitz’s advice that inmates would die within five minutes of the administration of an overdose of thiopental. *Id.* at *22-*23 (State rejected recommendation because of “political ramifications,”

though it was willing to adopt the barbiturate-only protocol if ordered to do so).

In sum, it is evident that a barbiturate-only protocol is a reasonably available alternative procedure that would address the significant risks created by Kentucky's use of pancuronium and potassium and its failure to ensure that the thiopental will be successfully administered. Kentucky has suggested no justification that would counsel against adopting the barbiturate-only protocol, and other States have all but admitted that doing so would not compromise any legitimate penological interests.

2. An Alternative Way To Minimize Risk Is For A Qualified Person To Monitor Anesthetic Depth Throughout The Execution.

If Kentucky insists on continuing to use pancuronium and potassium, then an alternative means of reducing unnecessary risk would be to ensure that the inmate is sufficiently anesthetized throughout the execution by monitoring anesthetic depth.

As Dr. Heath testified at trial, unconsciousness is a matter of degree. JA 406-07. Thus, the monitoring of "anesthetic depth" by qualified personnel is critical to ensuring that an inmate is sufficiently unconscious so as not to feel the agony and extreme pain that would necessarily otherwise result from the administration of pancuronium and potassium. *Id.* 418-22. The need for monitoring is even more critical when a paralytic such as pancuronium is

given, because an inmate would be unable to speak, move or otherwise signal pain. *Id.* (discussing subtle signs trained personnel would look for to assess consciousness in a paralyzed person). Unrebutted trial testimony established that monitoring by personnel trained in detecting consciousness would be necessary to remove this risk of the three-drug protocol, at least in the absence of systemic changes to the DOC's execution personnel and drug administration system. These personnel, using whatever monitoring equipment they deem necessary (such as a BIS monitor, blood pressure cuff, EKG, and/or EEG, *id.* 420-22, 439-40), could reasonably ensure that the execution procedures do not result in excruciating pain. It was also uncontested that Kentucky uses no equipment to monitor for anesthetic depth, *id.* 764, and does not have any personnel even attempt to verify unconsciousness other than the ineffectual check by the Warden described above.¹⁷

Other courts have recognized the importance of monitoring anesthetic depth and offered States the choice between adopting a one-drug protocol or using three drugs in conjunction with monitoring. *Morales*, 415 F. Supp. 2d at 1047 (requiring California to either conduct executions using a "single" barbiturate, or use a "qualified individual [to verify that the inmate] is in fact unconscious"); *see also Morales v. Hickman*, 438 F.3d 926, 931 (9th Cir. 2006), *cert. denied*, 546 U.S. 1163 (2006) (monitoring

¹⁷ The DOC's existing execution personnel have no anesthesia training and therefore would be unable to monitor anesthetic depth effectively. JA 404, 529.

by anesthesia professional who could take “all medically appropriate steps ... to immediately place or return Morales into an unconscious state” would “alleviate substantial concerns”).

D. Conclusion.

The risks created by the use of pancuronium and potassium are not justifiable in light of any penological interests. Those interests, to the extent they are legitimate, can be furthered through means that do not subject inmates to a danger of excruciating pain. Moreover, there are reasonably available alternatives that do not involve the same risk of unnecessary pain and could be adopted without compromising penological interests. Thus, Kentucky’s execution procedures involve an unnecessary risk of excruciating pain and agony and are therefore unconstitutional.

III. In The Alternative, This Court Should Remand To Allow The Lower Courts To Undertake The Proper Constitutional Analysis.

The record in this case establishes that Kentucky’s procedures create a significant and unnecessary risk of severe pain and agony, such that this Court should reverse the Kentucky Supreme Court’s judgment. At a minimum, Petitioners are entitled to a remand with directions to the lower courts to evaluate the evidence in a proper manner under the correct Eighth Amendment standard. As discussed above, the lower courts looked only at the quantum of risk, and they committed two additional analytical errors in applying the erroneous “substantial risk”

standard. They considered only a portion of the evidence of administration deficiencies in the record, and they assessed the degree of risk involved in Kentucky's procedures from the standpoint of each individual execution rather than considering the probability that repeated executions using those procedures would produce at least some torturous deaths. The Kentucky courts also failed to consider whether the risk of pain was unnecessary in view of Petitioners' showing that reasonably available alternative procedures would minimize the risks created by the DOC's deficient procedures.

Because the record was created and adjudicated in light of an erroneous standard, the lower courts should be required to reevaluate it under the correct "unnecessary risk" standard and to assess the risk in a proper fashion on consideration of all of the relevant facts. *See, e.g., Panetti v. Quarterman*, 127 S. Ct. 2842, 2863 (2007) (because "the record was developed pursuant to a standard we have found to be improper," "[t]he underpinnings of petitioner's claims should be explained and evaluated in further detail on remand."); *Johnson v. California*, 543 U.S. 499, 515 (2005) (noting that a "remand the case to allow the Court of Appeals for the Ninth Circuit, or the District Court, to apply [the legal standard] in the first instance" is routine where the lower courts have applied an incorrect legal standard).

CONCLUSION

For the foregoing reasons, this Court should reverse, or alternatively, should remand for further proceedings.

Respectfully submitted,

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