
Overview and Q & A

BAZE V. REES OVERVIEW

***Foreseeable and Unnecessary Risk:* Lethal Injection and the Three-Drug Protocol**

Since the Supreme Court's decisions in *Nelson v. Campbell* (2004) and *Hill v. McDonough* (2006), civil rights lawsuits across the country have uncovered information about the administration of lethal injection and have highlighted the risks inherent in lethal injection procedures as currently practiced. Litigation has revealed that most jurisdictions use the same three-drug formula, even though it is well known that the second and third drugs are extremely dangerous. The use of the three-drug formula puts the inmate at risk of consciously experiencing paralysis, suffocation, and excruciating pain if he is not adequately anesthetized by the first drug. The cases also have shown that lethal injection executions frequently are performed by inadequately trained personnel who lack the skill necessary to carry out an execution in a manner that does not violate the Eighth Amendment's prohibition against "cruel and unusual punishment." The absence of trained, skilled personnel exacerbates the foreseeable, unnecessary, and preventable risks created by current lethal injection procedures. Indeed, the risks associated with the three-drug formula and its administration by untrained, unskilled personnel have been amply demonstrated in botched executions that have occurred across the country.

Baze presents the Court, first, with the question: What legal standard must be applied to lethal injection challenges in trial courts across the country? Second, the Court has been asked to decide whether Kentucky's protocol for carrying out lethal injection violates the Eighth Amendment's ban on cruel and unusual punishment. The Court may answer the first question and remand the case to the lower courts to apply the legal standard to Kentucky's protocol, or it may address the constitutionality of Kentucky's protocol.

Baze does not attack lethal injection as a method of execution, nor does it challenge the death penalty as a punishment. Rather, it challenges the constitutionality of the Kentucky's protocol for administering lethal injection and seeks to ensure that executions by lethal injection are carried out in a manner that complies with the requirements of the Eighth Amendment. Moreover, *Baze* does not seek a permanent stay of the petitioners' executions. Rather, it seeks an injunction preventing the State from executing them pursuant to a protocol that creates an unnecessary risk of severe pain. If petitioners prevail on the merits of their claim, the State would be permitted to carry out executions by replacing the current lethal injection procedure with one that satisfies the standard set by the Supreme Court.

*Baze v. Rees**

Q & A

Table of Contents

| | |
|---|----|
| 1. What questions has the U.S. Supreme Court asked the parties to address?..... | 3 |
| 2. Why did the U.S. Supreme Court agree to review <i>Baze</i> ? | 3 |
| 3. What must the Court resolve in order to decide the first question? | 4 |
| 4. What standard do petitioners in <i>Baze</i> argue should be adopted by the Court? | 4 |
| 5. Must the Court decide whether Kentucky’s lethal injection protocol violates the Eighth Amendment?..... | 4 |
| 6. Is the decision in <i>Baze</i> likely to determine whether execution by lethal injection is unconstitutional in all cases and under all circumstances?..... | 5 |
| 7. Is there a national moratorium on executions until <i>Baze</i> is decided? | 5 |
| 8. How did the states and federal government come to adopt the three-drug protocol?..... | 6 |
| 9. What is the three-drug protocol and what foreseeable risks are associated with its use in an execution? | 8 |
| 10. If pancuronium bromide serves only to paralyze the muscles, what purpose does it serve in an execution? | 10 |
| 11. Isn’t it true that the protocols prescribe enough thiopental so that the inmate will be unconscious and will not feel pain when the second two drugs are administered?..... | 11 |
| 12. How does euthanasia of animals by veterinarians compare to lethal injection?..... | 11 |
| 13. What evidence supports the assertion that lethal injection protocols are developed by people who lack the necessary qualification and skills to devise them? | 13 |
| 14. What evidence supports the assertion that execution team members are often unqualified to carry out executions because, for example, they are improperly screened for the assignment, lack training, and are unfamiliar with the protocols and the risks involved in lethal injection?..... | 14 |

15. What evidence supports the assertion that the physical conditions under which lethal injection executions are carried out often create a foreseeable risk that the inmate will be conscious during the delivery of the second and third drugs? 16

16. There have been news reports about “botched” lethal injection executions. What are some examples and what does this term mean in the context of the *Baze* case? 17

17. Haven’t some jurisdictions revised their protocols to address these criticisms? 20

18. If states have been using lethal injection for decades, why did it take so long for the courts and the public to learn about the foreseeable risk that inmates will experience excruciating pain during lethal injection execution?..... 21

19. What is the position of medical organizations with regard to physician participation in executions?..... 23

*** Unless otherwise indicated, all citations to Brief for Petitioners and to *amicus curiae* briefs refer to filings in *Baze v. Rees*, No. 07-5439.**

*This document was prepared by the Death Penalty Clinic,
University of California, Berkeley, School of Law.*

*For more information, please visit www.lethalinjection.org or contact
Elisabeth Semel at esemel@law.berkeley.edu or
Ty Alper at talper@law.berkeley.edu*

1. What questions has the U.S. Supreme Court asked the parties to address?

1. Does the Eighth Amendment to the U.S. Constitution prohibit means for carrying out a method of execution that creates an unnecessary risk of pain and suffering as opposed to only a substantial risk of the wanton infliction of pain?
2. 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?
3. 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 injection can be carried out by using other chemicals that pose less risk of pain and suffering?

2. Why did the U.S. Supreme Court agree to review *Baze*?

When the Supreme Court grants *certiorari*, it does not announce a reason for its decision to review a case. At least four justices must vote to grant review. Given the questions that the Court asked the parties to brief, it is reasonably likely that at least four justices were troubled that the lack of a clearly articulated standard for evaluating lethal injection challenges has resulted in significantly different standards being applied in the dozens of challenges that have been brought.

Previous Supreme Court opinions, *Hill v. McDonough*, 126 S.Ct. 2096 (2006) and *Nelson v. Campbell*, 541 U.S. 637 (2004), held that challenges to lethal injection protocols could be filed as civil actions under 42 U.S.C. Section 1983. However, the Court did not announce the Eighth Amendment standard that would be applied in determining whether a particular lethal injection protocol violates the federal constitutional prohibition against cruel and unusual punishment.

Section 1983 lawsuits, challenging lethal injection protocols, have been filed in more than a dozen states and in the federal system. Courts across the country have set different standards based upon differing interpretations of what the Eighth Amendment requires to establish that a method of execution is “cruel and unusual.” In his dissenting opinion in *Alley v. Little*, 447 F.3d 976, 977 (2006), Judge Martin criticized “[t]he dysfunctional patchwork of stays and executions going on in this country.” He argued that there is “no principled distinction” to justify a system in which “condemned inmates are bringing nearly identical challenges to the legal injection procedure” and some executions are stayed, while others are carried out. *Id.* It is therefore appropriate for the Supreme Court to state the constitutional standard.

3. What must the Court resolve in order to address the Questions Presented?

The Court will decide what standard of proof must be met in order to establish an Eighth Amendment violation in the context of an execution. For example, some courts have applied an “unnecessary” or “unreasonable” risk of pain standard, at least one has adopted a “substantial risk” standard, while other courts require some level of risk of pain along with deliberate indifference on the part of the government actors. The Court will also decide whether the existence of reasonable alternative procedures that would lessen the risk of pain and suffering are relevant to the constitutional analysis.

4. What standard do the petitioners in *Baze* argue should be adopted by the Court?

In upholding the State’s lethal injection protocol, the Kentucky Supreme Court ruled that “[t]he method of execution must not create a substantial risk of wanton or unnecessary infliction of pain, torture or lingering death,” and that the “prohibition against cruel and unusual punishment does not require a complete absence of pain.” *Baze v. Rees*, 217 S.W.3d 207, 211-12 (Ky. 2006). Petitioners argue that “[a] State . . . 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.” Brief for Petitioners, at 28. They urge the Court to find that the Kentucky protocol “violates this bedrock Eighth Amendment requirement.” *Id.* Central to petitioners’ argument is evidence, developed in the lower courts, that: 1) if not properly anesthetized, an inmate “will suffer torturous pain and an agonizing death” when injected with pancuronium bromide and potassium chloride; 2) the inmate “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”; 3) Kentucky’s procedures and use of unqualified personnel render inadequate anesthesia likely; and 4) “Kentucky could easily eliminate the risk of such suffering by foregoing the use of pancuronium and potassium, and relying instead on a lethal dose of an anesthetic . . .” *Id.*

5. Must the Court decide whether Kentucky’s lethal injection protocol violates the Eighth Amendment?

No. It is entirely the choice of the Justices. The briefs filed by the parties and various *amici curiae* (friends of the court) address the evidence in the Kentucky record. However, the Court could decide to remand *Baze* to the lower court to apply the Supreme Court’s Eighth Amendment standard to the existing record or to develop further facts to which the standard will be applied. The Supreme Court’s determination of the proper standard will also allow lethal injection challenges that are still pending in other state and federal courts to proceed so that the lethal injection protocols in each jurisdiction can be measured against a consistent Eighth Amendment standard.

6. Is the decision in *Baze* likely to determine whether execution by lethal injection is unconstitutional in all cases and under all circumstances?

No. At the most, the Court may decide whether the record developed in the Kentucky case supports the conclusion that the state's lethal injection protocol violates the Eighth Amendment. The Court may limit its ruling to a clarification of what the proper constitutional standard is for evaluating lethal injection challenges, and then remand the case to the Kentucky courts to evaluate the petitioners' claims under that standard. In any event, the Court's decision will allow cases in other jurisdictions to proceed under the now-clarified standard. Lethal injection challenges are generally very fact-specific, and although all States except New Jersey use the same three drugs, they have different administration procedures and different executioners. Therefore the ruling in *Baze* will not necessarily determine the outcome of ongoing challenges in other states.

7. Is there a national moratorium on executions until *Baze* is decided?

There is not a national moratorium in the formal sense that the Supreme Court has issued an order prohibiting executions in the states or the federal system until it decides *Baze*. Nor will the Court issue such a blanket order. The Court will determine, on a case-by-case basis, whether to leave stays in place or whether to grant applications for stays. For example, the Court declined to grant a stay to Michael Richard, a Texas death-sentenced inmate, who was executed on September 25, 2007, the same day that the Court granted review in *Baze*. However, on October 13, 2007, the Supreme Court stayed the execution of Earl Wesley Berry (Mississippi), after the U.S. Court of the Appeal for the Fifth Circuit refused to do so. On November 15, 2007, the Court stayed Mark Schwab's execution (Florida), after the Eleventh Circuit denied a stay.

A number of state and federal courts and governors adopted a "wait and see" approach, and stayed executions until the Supreme Court decides *Baze*. By contrast, courts in states such as Alabama, Florida, Georgia, Mississippi, Tennessee, and Virginia set execution dates. Despite the recent Supreme Court stays in cases such as *Berry* and *Schwab*, officials in several states aggressively seek to carry out executions.

It is the Supreme Court's standard practice to hold any petitions for *certiorari* that may be affected by the resolution of a case before them. Because all inmates facing execution are filing *certiorari* petitions raising lethal injection challenges, the Supreme Court is likely granting stays of execution in order to follow its normal policy of holding these *certiorari* petitions pending the resolution of *Baze*. Following the *Berry* and *Schwab* stays, there is an increasing belief that the Supreme Court will continue to leave stays in place and grant them as new cases are presented until *Baze* is decided.

Also, executions have been halted in California and Maryland as a result of court rulings. Courts in each state have held that prison officials failed to comply with state administrative procedure laws requiring that lethal injection protocols go through a process of public scrutiny and comment before adoption.

8. How did the states and federal government come to adopt the three-drug protocol?

For a detailed discussion of the history of lethal injection as a method of execution in the United States, *see generally* Amicus Brief for the Fordham University School of Law, Lewis Stein Center for Law and Ethics [“Fordham Amicus Brief”] ; *see also* Brief for Petitioners, at 1-7, and sources cited in the brief; Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled The Death Penalty*, 76 Fordham L. Rev. 49 (2007); *Beardslee v. Woodford*, 395 F.3d 1064, 1073-74.

Of the 38 states that have a death penalty statute, lethal injection is the sole method of execution in 28 states, and is one of two methods in nine. Nebraska uses only electrocution. While the federal death penalty statute provides that execution is to be carried out by the method used in the state in which sentence was imposed, lethal injection is the only method that has been used since reinstatement of the federal death penalty. *See* Fordham Amicus Brief, at 13-14; *see also* Denno, *The Lethal Injection Quandary*, 76 Fordham L. Rev. at 96, n. 318.

The Supreme Court has not ruled on whether the electric chair or lethal gas violates the Eighth Amendment to the U.S. Constitution. *See* Fordham Amicus Brief, at 8-9. State legislatures – save Nebraska – all chose to make lethal injection an option or the sole execution method before cases that challenged those two methods could be decided by the Court. In *Bryan v. Moore*, 528 U.S. 960 (1999), the Supreme Court granted *certiorari* to review the constitutionality of the electric chair in Florida, but after the State added the lethal injection option, the Supreme Court dismissed the writ. *See Bryan v. Moore*, 528 U.S. 1133 (2000). The U.S. Court of Appeals for the Ninth Circuit held that California’s method of execution by lethal gas was “cruel and unusual.” *Fierro v. Gomes*, 77 F.3d 301, 309 (9th Cir. 1996), *vacated on other grounds*, 519 U.S. 918 (1996). Soon thereafter, the California Legislature adopted lethal injection as the sole method of execution.

In 1977 -- the year after the Supreme Court reinstated the death penalty -- Oklahoma became the first state to adopt lethal injection as a method of execution. *See* Fordham Amicus Brief, at 16-17; Brief for Petitioners, at 4. However, long before Oklahoma’s adoption of lethal injection, this method of execution was considered and rejected by several entities that studied it, including the State of New York and the government of Great Britain. In the 1950’s, a Royal Commission on Capital Punishment, which had engaged in a five-year study of the death penalty and consulted extensively with the country’s established medical organizations, rejected lethal injection as a method of execution. The Commission’s report reached this conclusion based upon a number of concerns, paramount among them was the acknowledgement that lethal injection requires medical skill in order to be carried out without risk of substantial pain. *See* Royal Commission on Capital Punishment 1949-1953 Report, at 261; *see also* Fordham Amicus Brief, at 16.

What was to become Oklahoma’s procedure was dictated to a state senator and state representative by a pathologist who was then Oklahoma’s chief medical examiner, Dr. A. Jay Chapman. Before consulting with Dr. Chapman, the representative had been told by the president of the Oklahoma Medical Association (OMA) that the organization did not want to become involved in developing a protocol because of ethical rules barring physician participation in executions. Dr. Chapman, who was advised of the OMA’s position, and told both legislators that he had no expertise in this area, nonetheless devised a procedure that involved the

administration of an ultra-short acting barbiturate and a paralytic chemical. See Fordham Amicus Brief, at 18-19; Brief for Petitioners, at 4-6; Denno, *Lethal Injection Quandary*, 76 Fordham L. Rev. at 66.

In 1977, after the Oklahoma Legislature enacted a statute making lethal injection the sole method of execution, the state's department of corrections adopted the protocol proposed by Dr. Chapman. Soon after, Dr. Chapman, who assumed that doctors would inject the chemicals, expressed concern about how the three-drug protocol would be administered, stating that if it was not done properly, "the convict may not die and could be subject to severe muscle pain." See Brief for Petitioners, at 6; Denno, *Lethal Injection Quandary*, 76 Fordham L. Rev. at 68 & n.118 and 72 (citing Jim Killackey, *Execution Drug Like Anesthesia*, Daily Oklahoman, May 12, 1977, at 1.) In 1981, at the suggestion of the medical examiner, the state's protocol was revised to add potassium chloride – the heart-stopping chemical. See Fordham Amicus Brief, at 23. Dr. Chapman, when recently asked if he was concerned about how the three-drug protocol was being administered, responded, "I never knew we would have complete idiots injecting these drugs. Which we seem to have." Human Rights Watch, *So Long as They Die: Lethal Injections in the United States*, at 34 (2006).

In 1982, Texas carried out the first lethal injection execution. Texas had adopted and utilized Oklahoma's three-drug protocol, despite consultation with a veterinarian who suggested administering only an overdose of pentobarbital, the anesthetic used in animal euthanasia. See Brief for Petitioners, at 6; Robbie Byrd, *Informal Talks Opened Door to Lethal Injection*, The Huntsville Item, available at: http://www.itemonline.com/archivesearch/local_story_277004148.html.

Other States followed Oklahoma's lead so that between 1977 and 2002, thirty-seven states moved to lethal injection as the sole method or one of two options. See Fordham Amicus Brief, at 24; Denno, *Lethal Injection Quandary*, 76 Fordham L. Rev. at 78. "Thus Oklahoma's hurriedly devised legislation and protocol became the basis for lethal injection in nearly every death penalty state in the country without ever being subjected to critical analysis." Fordham Amicus Brief, at 25. The trial court in *Baze* found that 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, it is this Court's impression that the various States simply fell in line relying solely on Oklahoma's protocol." See Fordham Amicus Brief, at 24 and Brief for Petitioners, at 7, both quoting, Joint Appendix at 755-56.

9. What is the three-drug formula and what foreseeable risks are associated with its use in an execution?

Almost all states, including Kentucky, that execute individuals by lethal injection, use three drugs to do so. This is sometimes referred to as the “three-drug formula.” The drugs are administered in the following sequence: sodium thiopental (an anesthetic intended to cause unconsciousness), pancuronium bromide (a neuromuscular blocking agent to paralyze the individual), and potassium chloride (to cause cardiac arrest and death). The small variations between states relate to matters such as the doses and concentrations of these drugs -- although the procedures and personnel for administering the drugs vary from state to state. All three drugs are to be administered intravenously. *See* Brief for Petitioners, at 10-12. For more information about the foreseeable risks associated with the three-drug formula, *see* Amicus Brief for Michael Morales, Michael Taylor, et al; Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al; Amicus Brief of Critical Care Providers and Clinical Ethicists.

Thiopental is a short-acting barbiturate. When used by anesthesiologists, it serves to temporarily render a patient unconscious and is followed by additional medical procedures and drugs that are administered to ensure that a “surgical depth” of anesthesia has been achieved and is maintained so that the patient does not experience pain or consciousness, that is, any awareness of what is taking place. *See* Brief for Petitioners, at 10; Amicus Brief of the American Society of Anesthesiologists in Support of Neither Party, at 5-6. The American Society of Anesthesiologists (ASA) has published a guide outlining the proper procedures for assessing whether the patient has achieved and is maintained at a “surgical depth” of anesthesia.

- The duration of unconsciousness depends upon the dose of thiopental. While the dose typically provided for in lethal injection protocols, if successfully administered into circulation, will produce deep unconsciousness, there are a host of foreseeable situations in which administration errors result in inadequate anesthesia, so that the inmate is conscious during the delivery of the second and third drugs. *See* Amicus Brief for Michael Morales, Michael Taylor, et al., at 5-6; Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al., at 6.
- The administration of thiopental is a necessary component of the execution procedure because it is the only component that can render the execution humane. It is necessary to induce surgical anesthesia in executions because the second two drugs used will cause excruciating pain and suffering if injected into conscious individuals. Importantly, the States acknowledge that pancuronium and potassium should not be administered to unanesthetized inmates because they will cause an unconstitutional amount of suffering. Dr. Dershwitz, the State’s expert in *Baze*, agreed that “inducing general anesthesia is ‘critical’ . . . to ensuring a human execution.” Brief for Petitioners, at 11-12, citing the Joint Appendix, at 558.

Pancuronium Bromide is a dangerous drug in the hands of untrained persons. It paralyzes all voluntary muscles, including the diaphragm, thereby preventing breathing. However, the drug does not affect consciousness or the ability to feel pain. It is used in surgery only when necessary to ensure that the procedure can be performed without reflex muscle contraction, and, except in exigent circumstances, it is administered only after the patient is anesthetized. *See* Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al., at 7-8; Brief for Petitioners, at 10-11.

- If the individual is not unconscious when pancuronium bromide is administered, he will experience the physical and psychological agony of conscious suffocation. Dr. Mark Dershwitz, the Kentucky Department of Corrections' expert in Baze, testified that the sensation of being injected with pancuronium is "agonizing" and "scary." Brief for Petitioners, at 11, citing the Joint Appendix, at 625-26. In the Tennessee lethal injection litigation, one of the State's witnesses, Tennessee Medical Examiner, Dr. Bruce Levy, testified that, without sufficient anesthesia, the administration of pancuronium bromide would cause agony because "a conscious person who is paralyzed would be unable to breathe. And suffocating to death would be a most violent form of death." *Harbison v. Little*, 2007 WL 2821230, at *11 (M.D. Tenn. Sept. 19, 2007).
- Because he is completely paralyzed, the individual has no ability to convey the fact that he is suffocating to death, and will appear peaceful and unconscious to observers. Dr. Mark Heath, an anesthesiologist who testified on behalf of petitioner at the hearing in Baze, explained that "[a]ny person or animal who'd been given pancuronium, they're going to appear serene and tranquil and peaceful and comfortable, regardless of whether they are in fact awake and in agony." Brief for Petitioners, at 11, citing the Joint Appendix, at 437.
- In the surgical context, monitoring of anesthetic depth by a trained anesthesia professional at the bedside of the patient is always considered critical to ensuring that the patient is sufficiently anesthetized for the duration the procedure. When a neuromuscular blocker is used in surgery, such monitoring is particularly crucial to prevent the phenomenon known as "conscious awareness" -- where the patient is awake and experiencing the pain of surgery, but is unable to express that pain because he or she is paralyzed. In the execution context, administration of pancuronium bromide by unqualified personnel and the failure to follow the ASA's procedures create a foreseeable risk that execution personnel will not realize that the individual is not sufficiently anesthetized when the pancuronium bromide and the potassium chloride are administered.
- "Neuromuscular blocking agents possess no sedative or pain-relieving properties and therefore serve no palliative function for a dying patient. At the same time, the use of such drugs brings significant risks to the patient. Neuromuscular blocking agents can paralyze the patient's diaphragm and cause a patient to asphyxiate. In addition, neuromuscular blocking agents can mask the physical signs that doctors look for when attempting to identify whether a dying patient is suffering pain." Amicus Brief of Critical Care Providers and Clinical Ethicists, at 5; *see also* Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al., at 7-8.

Potassium Chloride is used to induce cardiac arrest and bring about the death of the inmate. The nerve fibers in the walls of the veins are highly sensitive to potassium ions, which are released when there is an intravenous injection of concentrated potassium. There is no medical dispute that, if the individual is not deeply unconscious, intravenous injection of the drug causes excruciating pain -- likened to the feeling of setting one's veins on fire -- followed by a heart attack. While other heart-stopping drugs that do not cause such pain are available, none are used in lethal injections. Dr. Dershwitz testified in *Baze* that "a conscious person given potassium at the concentration level Kentucky uses would be 'screaming' in agony." Brief for Petitioners, at 11, citing the Joint Appendix, at 600, 604.

- "The use of potassium chloride, the drug that results in death in the Kentucky lethal injection protocol, fails to comply with minimum veterinary standards for the humane euthanasia of animals." Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al., at 9. "Because of the painful effects of the drug, use of potassium chloride on a conscious patient is 'unacceptable' and 'absolutely condemned' in humane euthanasia." *Id.* at 10, quoting the AVMA Guidelines on Euthanasia (June 2007)(formerly the 2000 Report of the AVMA Panel on Euthanasia) at 12.

10. If pancuronium bromide serves only to paralyze the muscles, what purpose does it serve in an execution?

Pancuronium serves no medical or therapeutic purpose; it is cosmetic. The chemical is administered so that witnesses to the execution will not have to observe any involuntary movements by the inmate. See Amicus Brief for Michael Morales, Michael Taylor, et al. in Support of Petitioners, *Baze v. Rees*, at 20. Dr. Mark Dershwitz, who has served as an expert for many states during litigation challenging their lethal injection practices, testified that pancuronium has no benefit for the inmate. Dep. Tr. vol. I at 119-120, *Jackson v. Danberg*, No. 06-CV-300 (D. Del. Sept. 10, 2007) (testimony of Dr. Mark Dershwitz). It is administered for the benefit of witnesses to the execution. *Id.*

According to a group of prominent physicians, professors of medicine, clinical ethicists, and other health care providers who specialize in critical care medicine, medical ethics, and end-of-life care, "the medical and medical ethics communities have rejected the introduction of neuromuscular blocking agents" to "mask muscle movements such as convulsions or gasps that witnesses may perceive as suffering." Amicus Brief of Critical Care Providers and Clinical Ethicists, at 5. This decision was based upon the fact that "there is no medical justification for the drug"; it "introduces unacceptable risks of extreme pain and distress" and "can mask the signs of severe pain"; and observable, physical behavior provides an essential indicator of whether the individual is suffering. *Id.* at 11-12.

"In the veterinary context, pancuronium bromide is wholly superfluous to the goal of humane euthanasia. Its only effect would mask any suffering endured by the patient and interfere with an assessment of consciousness. Its use as contemplated by the Kentucky lethal injection protocol is therefore contrary to veterinary standards and humane euthanasia of animals." Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al., at 18.

11. Isn't it true that the protocols prescribe enough thiopental so that the inmate will be unconscious and will not feel pain when the second two drugs are administered?

While different jurisdictions specify different dosages of thiopental, there is no medical dispute that – *if a sufficient dose is properly administered* – the doses used will put the inmate into a deep, protracted anesthetic state. The problem is that lethal injection executions are *routinely* carried out by personnel who are not properly trained to administer and monitor the thiopental and are doing so under conditions that make proper administration highly problematic, if not impossible. For example, personnel are not adequately trained to make up the dosages of thiopental, are not qualified to start the IV lines, typically administer the drugs from another room, do not understand the effects of the drugs, and are not trained to monitor anesthetic depth. As a result, they are unable to ensure that the inmate receives the full intended dose of thiopental and reaches a deep anesthetic state prior to the administration of the drugs that cause pain and suffering. When the anesthetic drug fails to work as it is intended to -- because, for example, of problems in mixing and preparing the drug or because there are IV access issues or leakage in the IV line -- then delivery of the second and third drug cause excruciating pain and suffering. When these problems occur in administering or monitoring the anesthesia and the inmate is given the second drug, he is left completely paralyzed and unable to communicate. So the fact that he is being suffocated is masked and not visible to observers. The same is true when he receives the third drug and is experiencing searing pain as his heart is stopped; observers of the execution will not be able to detect this.

For a detailed discussion of the lack of trained personnel and inadequate facilities, *see* Amicus Brief for Michael Morales, Michael Taylor, et al., at 9-17 and 22-28.

12. How does euthanasia of animals by veterinarians compare to lethal injection?

The predominant method of animal euthanasia, and the one required by law in Kentucky, involves the injection of a single drug, sodium pentobarbital, which does not cause any pain to the animal upon administration, aside from venipuncture at the injection site. Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al., at 4. When injected with an overdose of pentobarbital, a long-acting anesthetic, the animal quickly moves into a state of unconsciousness and then death. *Id.* In June 2007, the American Veterinary Medical Association (AMVA) published guidelines on the euthanasia of animals. The guidelines, which were written after an examination of a range of euthanasia methods, provide that whenever animal euthanasia is required, “death should be induced as painlessly and quickly as possible.” AMVA Guidelines on Euthanasia (June 2007)(formerly the 2000 Report of the AVMA Panel on Euthanasia), at 18. The AMVA also states that the ideal drug for use in euthanasia is a “potent, long-acting, stable” barbiturate. *Id.* at 11.

State and federal lethal injection protocols call for the injection of a three-drug combination administered in the following sequence: sodium thiopental (a short-acting anesthetic), pancuronium bromide (a neuromuscular blocking agent that paralyzes the individual) and potassium chloride (which causes death by inducing cardiac arrest). Brief for Petitioners, at 10-12. In contrast to the anesthetic used in animal euthanasia, the anesthetic used in lethal injection protocols is an “ultra short acting” barbiturate and the effects wear off much more rapidly. Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al., at 15. The second drug in the lethal injection three-drug formula, pancuronium bromide, is banned by most states for use in animal euthanasia, including Kentucky, because it causes paralysis, inhibiting the ability to determine if the patient is experiencing pain during the procedure. *Id.* at 18.

The AVMA guidelines dictate that the use of potassium chloride -- the third drug administered under current state and federal lethal injection protocols -- is “unacceptable” and “absolutely condemned” unless the animal is “in a surgical plane of anesthesia,” defined as a level of anesthesia characterized by unconsciousness, loss of reflex muscle response and loss of response to noxious stimuli.” Amicus Brief of Drs. Concannon, Dennis Geiser, et al, at 10. The guidelines further state that, “[i]t is of utmost importance that personnel performing this [euthanasia by potassium] are trained and knowledgeable in anesthetic techniques, and are competent in assessing anesthetic depth appropriate for the administration of potassium chloride intravenously.” AMVA Guidelines at 12. Unlike lethal injections, where inmates routinely are left unattended while the drugs are administered from another room, veterinary professionals are required to be in close physical contact with the animal so that they can monitor vital signs, IV access sites and ensure that the animal does not experience pain or suffering during the process. *See* Amicus Brief of Drs. Concannon, Dennis Geiser, et al, at 12.

The veterinarians who filed the *amicus brief* emphasizes that the lethal injection protocol used by the states and federal government does not meet the minimum standards of care required of veterinarians in the humane euthanasia of animals. *See* Brief of Drs. Concannon, Dennis Geiser, et al., at 8. Their brief explains that veterinarians could not euthanize animals under the Kentucky lethal injection protocols for several reasons, including 1) the use of potassium chloride fails to comply with minimum veterinarian standards because the lethal injection protocol does not include safeguards to ensure that the patient is unconscious before the injection of the drug, which would cause excruciating pain if the subject is conscious and; 2) the use of pancuronium bromide, which completely paralyzes voluntary muscle movement, is prohibited for use in animal euthanasia in Kentucky because it prevents the assessment of a patient’s consciousness and serves no therapeutic purpose. *Id.* at 9-20.

For a detailed discussion of the methods used by veterinarians to humanly euthanize animals and the difficulties in achieving humane euthanasia using the three-drug lethal injection protocol, *see* Amicus Brief of Drs. Kevin Concannon, Dennis Geiser, et al.

13. What evidence supports the assertion that lethal injection protocols are developed by people who lack the necessary qualifications and skills to devise them?

The adoption of lethal injection protocols throughout the United States can best be described as a cascade of misinformation whereby authorities in one jurisdiction copied, sometimes verbatim, the procedures in another. Beginning in Oklahoma, the protocols were adopted without independent research or consultation with qualified experts. For more information about the development of the protocols, see Brief for Petitioners, at 4-7; Fordham Amicus Brief, at 3, 15-16; Amicus Brief for Michael Morales, Michael Taylor, et al., at 13-20.

Dr. A. Jay Chapman, then Oklahoma's chief medical examiner, assisted two state legislators in drafting Oklahoma's lethal injection procedure. At the time he commented that he "was an expert in dead bodies but not an expert in getting them that way." Fordham Amicus Brief, at 18 (quoting Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled The Death Penalty*, 76 Fordham L. Rev. 49, 65-66 (2007)). The first lethal injection statute, enacted in Oklahoma in 1977, "was purposefully vague." Fordham Amicus Brief, at 22. The legislature delegated responsibility for lethal injection executions to the department of corrections. "This ad hoc process required no specific implementation procedures, no record-keeping, no reporting, no studies, no vetting of experts—in other words, no oversight of any kind." *Id.* Dr. Chapman's original protocol called for only two drugs – a sedative and a paralytic. Several years later, potassium chloride was added as the third chemical. *Id.*

Between 1977 and 2002, thirty-seven states switched to lethal injection, adopting Oklahoma's three-drug combination, "without conducting any independent studies or research. As the [Baze] trial court found: "[T]here is scant evidence that ensuing States' adoption of lethal injection was supported by any additional medical or scientific studies . . . [Rather] the various States simply fell in line relying solely on Oklahoma's protocol." Fordham Amicus Brief, at 24, quoting Brief for Petitioners, at 7; Joint Appendix, at 755-56.

Missouri

- After a botched execution in the mid-1990's, the Missouri Department of Corrections gave responsibility for the development of a new protocol to a surgeon identified in court documents as "Dr. Doe" See Amicus Brief for Michael Morales, Michael Taylor, et al., at 13. The Director of the Missouri Department of Corrections instructed Dr. Doe to "keep [the Director] looking good...so [the Director] does not have to go out and explain why we made a mistake or we may have a problem or why it didn't go smoothly." Tr. of Test. of John Doe No.1 at 62, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006). Although Dr. Doe was given absolute authority to develop a written protocol, he never did so. *Id.* at 70. Dr. Doe supervised 54 executions in Missouri. See [Jeremy Kohler, Behind the Mask of the Execution Doctor](#), St. Louis Post-Dispatch, July 30, 2006, at A1.

- By his own admission, Dr. Doe is dyslexic, which he testified explains “inconsistencies in what I call drugs.” Tr. of Testimony of John Doe 1 at 25, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006). Dr. Doe has been sued for malpractice more than 20 times and in 2003, the State Board of Healing Arts publicly reprimanded him for concealing malpractice suits from a hospital where he was a treating physician. See [Kohler, Behind the Mask](#), at A1.

Federal Government

- Notwithstanding Dr. Doe’s admissions and history of reprimands, public records in the Federal lethal injection challenge reveal that the Federal Government retained Dr. Doe to develop its protocols, place and monitor intravenous lines, and monitor levels of consciousness. [Plaintiffs’ Opposition to Defendant’s Motion for Judgment on the Pleadings and Motion to Lift the Stay of the Plaintiffs’ Executions](#), at 38-40, *Roane v. Gonzalez*, No. 05-2337 (D.D.C. July 10, 2007).

14. What evidence supports the assertion that execution team members are often unqualified to carry out executions because, for example, they are improperly screened for the assignment, lack training, and are unfamiliar with the protocols and the risks involved in lethal injection?

The following are several examples, which are more fully developed in the amicus curiae briefs in support of the petitioners in *Baze*, including the Amicus Brief for Michael Morales, Michael Taylor, et al., at 9-17.

California

- In a [memorandum opinion](#) on the California challenge, Judge Jeremy Fogel found that “team members almost uniformly have no knowledge of the nature or properties of the drugs that are used or risk of potential problems associated with the procedure.” *Morales*, 465 F. Supp. 2d at 979. He found that one of the “critical deficiencies” of California’s lethal injection protocol was “[a] lack of meaningful training. *Id.* Judge Fogel’s conclusion was based on some of the following undisputed facts.
- The warden, who presided over two executions and would have presided over the scheduled execution of Michael Morales, testified that there are no rules or regulations that require him to evaluate the qualifications, experience, or training of the team members and that there are no rules requiring him to do so. Joint Statement of Undisputed Facts at 3, *Morales v. Tilton*, No. C06-0219, C06-926 (N.D. Cal. Nov. 27, 2006) [hereinafter “JSUF”]. In fact, team members were selected by other team members by unanimous vote. JSUF at 2. The execution team leader himself was disciplined for smuggling illegal drugs into San Quentin prison, and subsequently appointed to the execution team. JSUF at 3. Another team leader had been diagnosed with, and disabled by, post-traumatic stress disorder, and he remained on the team despite his

acknowledgement that working on the execution team is the most stressful responsibility a prison employee could ever have. JSUF at 4.

- A member of the California execution team, who had participated in eight executions and was responsible for mixing and preparing the thiopental, testified that the team really did not have any training. JSUF at 13. The team did not practice mixing the anesthetic, nor did they practice responses to foreseeable contingencies that could easily arise during executions. JSUF at 12-14.
- When an execution team member in California was asked in a deposition whether she had read the protocol, she responded, “I don’t know what you’re talking about.” JSUF at 55.
- During the execution of Stanley Williams on December 13, 2005, a registered nurse who was responsible for inserting one of the catheters in Mr. Williams’ arm made two unsuccessful attempts to do so, at which point Mr. Williams’ vein ruptured. JSUF at 18. After a third unsuccessful attempt at setting the catheter, the IV team failed to realize that they had still failed to set the catheter. Someone stated twice that the left IV line was still not flowing and had failed. *Id.* Nonetheless, the Warden directed the team to “proceed” and the execution was carried out without the IV in the left arm properly set or operating. *Id.* Doing so created a foreseeable risk that the next two drugs would be administered while Mr. Williams was not properly anesthetized, a risk that apparently was either not understood by the execution team or was of no concern to them. *See* Amicus Brief for Michael Morales, Michael Taylor, et al., at 35. When asked about the problems setting the catheter in Mr. Williams’ arm, the nurse in question stated that other execution team members’ only response was “shit does happen.” JSUF at 54.

Florida

- Following the botched execution of Angel Diaz in Florida on December 13, 2006, the Florida Governor’s Commission on Lethal Injection reviewed the state’s protocols and concluded that team members were inadequately trained. Governor’s Commission on Administration of Lethal Injection, Final Report with Findings and Recommendations, at 8 (Mar. 1, 2007). For example, the primary executioner testified that he does not participate in practice sessions, trainings, or instruction periods prior to executions. Hr’g Tr. vol. IV at 80, Governor’s Commission on Administration of Lethal Injection (Feb. 9, 2007) (testimony of Primary Executioner). *See* Amicus Brief for Michael Morales, Michael Taylor, et al., at 11.

Missouri

- Dr. Doe, who supervised 54 executions in Missouri, *See* [Jeremy Kohler, Behind the Mask of the Execution Doctor](#), St. Louis Post-Dispatch, July 30, 2006, at A1, is dyslexic, which he testified explains “inconsistencies in what I call drugs.” Tr. of Testimony of John Doe 1 at 25, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006). By his own estimate, Dr. Doe has been sued for malpractice more than 20 times and in 2003, the State Board of Healing Arts publicly reprimanded him for concealing malpractice suits from a hospital where he was a treating physician. *See* [Kohler, Behind the Mask](#), at A1.

- Dr. Doe testified that during executions, he varied the amount of thiopental he gave inmates as he saw fit, with no requirement that he or others involved report the amount that was actually prepared or used. Tr. of Testimony of John Doe 1 at 13-19 (*Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006). He testified that he had recently begun giving inmates, at most, half the amount of thiopental than he had previously given, because a change in the drug packaging forced him to “improvise.” *Id.* at 9-12, 24. He could not say how much thiopental he had administered in any particular execution, and his poor recordkeeping renders it impossible to reconstruct the dose after the fact. *Id.* at 14-18.

Tennessee

- Judge Trauger, who presided over the Tennessee challenge, found that executioners are “largely ignorant” of potential pitfalls identified by the experts. *Harbison v. Little*, No. 3:06-1206, 2007 WL 2821230, at *17 (M.D. Tenn. Sept. 19, 2007). She also concluded that “[i]n many cases, the executioners are not even aware that the risks exist” and are “completely unprepared” for them. *Id.* at *18. .

Maryland

- In the Maryland litigation, the IV team lines leader and the person responsible for injecting the lethal chemicals testified that they had never seen a copy of the execution operations manual. Trial Tr. at 113-14, *Evans v. Saar*, No. 06-149 (D. Md. Oct. 10, 2006)(testimony of Contractual Team B); Trial Tr. at 119, *Evans v. Saar*, No.06-149 (D. Md. Sept. 20, 2006) (testimony of Contractual Team A).

15. What evidence supports the assertion that the physical conditions under which lethal injection executions are carried out often create a foreseeable risk that the inmate will be conscious during the delivery of the second and third drugs?

The following are examples, which are more fully developed in the *amicus curiae* briefs filed in support of petitioners, including the Amicus Brief for Michael Morales, Michael Taylor, et al., at 22-23, 27-28.

California

- In a number of states, execution team members, who administer the drugs -- including the thiopental -- and monitor the inmate do so from a room outside the execution chamber. In the California challenge, Judge Fogel found that “the lighting is too dim, and the execution team members are too far away, to permit effective observation . . . much less to determine whether the inmate is conscious; this is exacerbated by the fact that the chamber door is sealed shut during executions . . . rendering it virtually impossible to hear any sound from the chamber.” [Morales v. Tilton, 465 F. Supp. 2d at 980.](#)

Tennessee

- Even after Tennessee revised its protocol earlier this year, a federal district court judge ruled that the remote administration of the chemicals through the IV lines, which allows only for visual monitoring, “increases the plaintiff’s risk of unnecessary pain.” [*Harbison v. Little*, 2007 WL 2821230, at *20.](#)

16. There have been news reports about “botched” lethal injection executions. What are some examples and what does this term mean in the context of the *Baze* case?

Executions can be “botched” in a number of ways. Some botched executions occur in a manner that causes the individual to suffer excruciating and protracted pain that is apparent to witnesses and documented by post-mortem evidence such as photographs and autopsy reports. These include executions in which execution personnel are unable to insert the IVs, leading to protracted and repeated attempts to do so, or even “cutdowns,” which are surgical incisions designed to locate veins under the skin; executions in which one or both IVs fail, causing the drugs to be injected into the tissue surrounding the vein; or executions in which the administration failure is so complete that the inmate is not paralyzed and is able to express pain. However, focusing solely on these cases, which have garnered significant publicity, misses two of the crucial points about the foreseeable risk of torturous pain and suffering. First, the administration of the paralytic agent – pancuronium bromide – hides evidence of consciousness and makes it impossible for the inmate to convey the fact he is experiencing suffocation from the pancuronium and searing pain from the potassium chloride. Some executions may be botched in a manner that renders the pain suffered by the inmate invisible to witnesses, such as when an inmate receives sufficient pancuronium to paralyze but insufficient thiopental to cause surgical anesthesia. Second, many states fail to record vital signs or collect post-mortem data that could provide clues as to whether executions were humane. Therefore the known incidence of botched executions almost certainly understates the actual incidence.

The following are examples of known botched executions, which are more fully developed in the Brief for Petitioners, at 20-24, and in the *amicus curiae* briefs, including the Brief for Michael Morales, Michael Taylor, et al., at 22-23 and 27-28.

Arkansas

- During the 1992 execution of Ricky Rector, executioners were unable to find a vein in his arm. They made a two-inch incision in his arm in an attempt to locate a vein. Rector was heard moaning throughout the 50 minute execution. Joe Farmer, *Rector, 40, Executed for Officer’s Slaying*, Arkansas Democrat-Gazette, Jan. 25, 1992, at 1.

Florida

- During the December 2006 execution of Angel Diaz in Florida, execution personnel made grievous errors in inserting the IVs in Mr. Diaz' arms, making it impossible for the lethal drugs to be delivered into his blood stream. They also departed from the lethal injection protocol, resorting to an improvised second dose of the lethal chemicals without troubleshooting the failure of the first dose or alerting the Warden to the problem. Those errors led to the disastrous and torturous 34 minute execution of Mr. Diaz, which are described in the Brief for Petitioners, at 20-21, and in the Amicus Brief for Michael Morales, Michael Taylor, et al., at 32-33, citing the Governor's Comm'n on Administration of Lethal Injection, Final Report with Findings and Recommendations (Mar.1, 2007); Proceedings of the Governor's Comm'n on Lethal Injection (Feb. 12, 2007) ["Governor's Comm'n"] and the Summary of the Findings of the Dep't of Corrections Task Force Regarding the Dec. 13, 2006 Execution of Angel Diaz ["Diaz Findings"].
- While administering the thiopental to Mr. Diaz, the executioners felt resistance in the primary IV line and switched to the back-up line. They also felt resistance in the back-up line. Instead of following the protocol for administering the second dose, and without investigating the cause of resistance in both IV lines, the executioners injected the pancuronium and potassium – the second and third drugs. *See* Diaz Findings, at 5; Amicus Brief for Michael Morales, Michael Taylor, et al., at 32; Brief for Petitioners, at 21. Though Florida did not collect the data or undertake the monitoring that would enable a conclusive determination as to whether Mr. Diaz suffered, the conclusions of the investigation that followed Mr. Diaz's execution strongly suggest that Mr. Diaz, who exhibited gasping behavior consistent with partial paralysis from the pancuronium, was conscious when the potassium chloride was administered and that he suffered the torture of being conscious while he asphyxiated and suffered the pain of cardiac arrest. *See* Governor's Comm'n, at 97-98, 101; Diaz Findings, at 5; Amicus Brief for Michael Morales, Michael Taylor, et al., at 32-33; Brief of Petitioners, at 20-21.
- The investigation, as well as Mr. Diaz' autopsy, explained why the executioner felt resistance in the IV lines. Both IVs had pierced the veins in Mr. Diaz' arms, causing the drugs to be pushed into the soft tissue and slowing the absorption rate. *See* Diaz Findings at 5. The drugs in Mr. Diaz' soft tissue caused 12-inch chemical burns on both arms where the drugs had been injected into the soft tissue. *See* Governor's Comm'n (Postmortem Exam of Angel Diaz, at 1); Amicus Brief for Michael Morales, Michael Taylor, et al., at 32-33; Brief of Petitioners, at 21. The Governor's Commission found that the execution team members were not properly trained to do their jobs. *See* Governor's Comm'n, Final Report with Findings and Recommendations (March 1, 2007), at 8; Amicus Brief for Michael Morales, Michael Taylor, et al., at 33.

Ohio

- During the 2006 execution of Joseph Lewis Clark in Ohio, technicians struggled to place the IVs in Mr. Clark's arms, sticking him 19 times with large-gauge IV needles, and taking more than 20 minutes to set the IVs. Several minutes after the executioners started pushing the lethal drugs, Mr. Clark's vein collapsed and his arm began to swell, indicating that the drugs were being pushed into the flesh of his arm, rather than his blood stream. Mr. Clark raised his head off the gurney and repeatedly stated, "It don't work." The technicians closed the curtains that separated the witnesses and worked for 30 additional minutes to replace the IVs. Witnesses reported hearing Mr. Clark moan and cry out from behind the closed curtains. *See* Brief for Petitioners, at 22; Amicus Brief for Michael Morales, Minchael Taylor, et al., at 33-34.
- Overall, Mr. Clark's execution took 90 minutes. The autopsy revealed that the lethal chemicals had been injected outside of Mr. Clark's veins and cited "inadequate skills of the technical personnel involved" as the reason for the error. The murder victim's brother, who was a witness to the execution, publicly stated, "Nobody should have to die a horrible death." *See* Autopsy Report for Joseph Clark, Dr. L.J. Dragovic, Office of the Medical Examiner, Oakland County, Michigan (Aug. 15, 2006); Adam Liptak, *Trouble Finding Inmate's Vein Slows Lethal Injection in Ohio*, N.Y. Times, May 3, 2006; John Mangels, *Condemned Killer Complains Lethal Injection "Isn't Working,"* Cleveland Plain Dealer, May 3, 2006; Brief for Petitioners, at 22; Amicus Brief for Michael Morales, Michael Taylor, et al., at 33-34.

Oklahoma

- According to a witness to the 2001 execution of Lloyd LaFevers in Oklahoma, when the flow of lethal drugs was started, Mr. LaFevers raised his head off the bed and breathed deeply. They saw his chest rise and fall deeply as he appeared to be gasping for air. *See, e.g.,* Aff. of Catherine Burton at 1, *Patton v. Jones*, No. 06-591 (W.D. Okla. Feb. 19, 2004); Dec. of Patrick J. Ehlers at 2, *Patton v. Jones*, No. 06-591 (W.D. Okla. Mar. 1, 2004). The autopsy revealed that one of the IVs had infiltrated after the thiopental was administered. *See* Autopsy Report for Lloyd LaFevers, Dr. Larry Balding, Office of the Chief Medical Examiner, Oklahoma City, Oklahoma (Jan. 31, 2001). A federal district court found testimony regarding Mr. LaFevers' execution credible that "something did go awry and most regrettably so." Prelim. Inj. Tr. at 235, *Patton v. Jones*, No. 06-591 (W.D. Okla. Aug. 8, 2006).

17. Haven't some jurisdictions revised their protocols to address these criticisms?

Overwhelmingly, state and federal authorities have resisted change. Those that have revised their protocols have made only cosmetic or trivial changes that do not reduce the foreseeable risk that inmates will experience an excruciatingly painful death. These jurisdictions have refused to consider fundamental changes such as using drugs that do not cause pain, or monitoring anesthetic depth. In addition, the so-called revisions are developed in secret and therefore do not reflect a broad base of scientific input. The following examples of the inadequacies of these changes are discussed more fully in the Amicus Brief for Michael Morales, Michael Taylor, et al., at 23-27.

California

- The California Department of Corrections and Rehabilitation responded to a federal judge's order that it review and revise its lethal injection protocols by insisting that the review process be conducted in secret. *See Morales v. Tilton*, 465 F.Supp.2d at 982-83; Henry Weinstein, *Secret Talks on Execution Challenged*, L.A. Times, Feb. 2, 2007. Although Judge Fogel refused to permit an entirely secret review (*Morales v. Tilton*, No. C-06-219 JF (N.D. Cal. Mar. 6, 2007)). California's new protocol still leaves most critical decisions in lethal injection executions – “recruitment, selection, retention, and training of all staff” and “overall implementation of the procedure” – in the sole discretion of the Warden at San Quentin, where all California executions are carried out. *See State of California, San Quentin Operational Procedure No. 0-770, Execution by Lethal Injection IV.A, May 15, 2007.* Although Judge Fogel suggested that the state remove the two dangerous drugs from its protocol, or obtain medically trained individuals to administer the existing drugs, the state opted to do neither.

Florida

- Under Florida's new protocol, the execution team warden retains “final and ultimate decision making authority in every aspect of the lethal injection process,” including the authority to permit deviations from the written protocol. The new Florida protocol retains the use of the three-drug formula, and while it specifies that all execution team members should receive “sufficient training”, authority is delegated to the warden to ensure that training occurs. There is no external mechanism to enforce the training requirement or mandate that trained medical personnel evaluate the training curriculum and simulations to verify that team members are sufficiently trained. *See Florida Department of Corrections, Execution by Lethal Injection Procedures 1-2 (July 31, 2007).*

Tennessee

- In September, a federal judge ruled that the state's new lethal injection protocols are unconstitutional. *Harbison v. Little*, ___ F.3d___, 2007 WL 2821230 (M.D. Tenn. Sept. 19, 2007). The new protocols had been adopted after a state committee, appointed by the Governor, conducted a study and made recommendations. The judge found that Tennessee's Commissioner of Corrections, George Little, had not attended the committee

meetings nor conferred with any of the experts who had provided information to the committee. *Id.* at 27. In sum, “despite the hard work of the Protocol Committee, none of the recommendations that were the fruit of its hard work were accepted by Corrections Commissioner Little nor integrated into the new protocol. *Id.* at *27.

- The Tennessee Protocol Committee recommended the state switch to a one-drug protocol. The hearings in *Harbison* revealed that Commissioner Little, after initially denying that the committee made this recommendation to him, and vacillating about his knowledge of the recommendation, ultimately admitted that the committee recommended the one-drug protocol. TR 43. *Harbison v. Little*, 2007 WL 2821230 at * 7. In discussing the recommendation with the Governor’s Legal Counsel, Commissioner Little said that he did not want “‘Tennessee to be at the forefront of making the change from the three-drug protocol to the one drug protocol,’ that he thought adoption of the one-drug protocol could lead to ‘political ramifications’ and that, if the three-drug protocol were held unconstitutional, Tennessee ‘could always fall back on the one-drug protocol.’” TR 25-26. *Id.* at *6-7.
- The judge in *Harbison* also concluded that, under the new protocol, “[t]he three executioners, all Corrections Department employees selected by Warden Bell (TR 100), are untrained in the duties they are expected to perform and, at hearing, were unable to identify potential pitfalls that the expert witnesses identified to be significant risks.” *Harbison v. Little*, 2007 WL 2821230 at *14. He held opinions of the expert witnesses, as well as admissions by execution team members during the hearings, established that there are “known risks-accidents which, given enough of an opportunity, will occur-for which the executioners are completely unprepared. In many cases, the executioners are not even aware that the risks exist. This is not a mere ‘risk of negligence’ but a guarantee of accident, written directly into the protocol itself. Accordingly, the court finds that the failure to utilize adequately trained executioners increases the plaintiff’s risk of unnecessary pain.” *Id.* at * 18.

18. If states have been using lethal injection for decades, why did it take so long for the courts and the public to learn about the foreseeable risk that inmates will experience excruciating pain during lethal injection execution?

In most states and under the federal death penalty system, officials have kept much about the lethal injection process – from the drafting of the protocols to what takes place during executions –scrupulously secret. Only recently, through litigation, have lawyers and the public gained access to the lethal injection protocols that states and the federal government have been using for decades, exposing the foreseeable risk that inmates will experience unconstitutional pain.

The shroud of secrecy that hides the reality of state and lethal injection procedures has existed and continues to exist on five levels: 1) execution protocols are often kept confidential, protected from scrutiny and oversight, and hiding the incompetence of corrections officials ; 2) the responsibility of creating and carrying out execution procedures is delegated to corrections officials with little or no oversight by democratically accountable representatives; 3) the paralytic drug given to the inmates masks any pain; 4) witnesses are prevented from seeing the entire execution process due to curtain and execution chamber layout and; 5) until lawyers began to

challenge lethal injection protocols, most states' execution records were not publicly available (and many remain unavailable). *See* Amicus Brief for the American Civil Liberties Union, the ACLU of Kentucky, and the Rutherford Institute, at 4 [“ACLU-Rutherford Amicus Brief”]. For more information about the use of the paralytic (pancuronium bromide), see answers to questions 9, 10 and 11, and references cited therein.

The majority of states have refused to disclose their lethal injection protocols to the public, preventing meaningful evaluation of the execution process. ACLU-Rutherford Amicus Brief, at 6. In a 2005 study of lethal injection protocols, only six states had protocols that were available to the public. *Id.* at 7 (citing Denno, *Lethal Injection Quandary*, 76 Fordham L. Rev. at 95). States even refuse to disclose information about protocols to lawyers during the course of litigation. For example, in Alabama, in response to discovery requests, the state provided attorneys with a heavily redacted copy of their protocol and carried out three more executions before making the full protocol public. Kentucky refused to confirm the existence of a protocol and claimed that even if a policy did exist, it would be exempt from disclosure because of security issues. In Montana, the information that was made public failed to include the specific drugs or doses used to carry out the procedure. *See* ACLU-Rutherford Amicus Brief, at 6-9. This secrecy also impeded disclosure of evidence that executions were being carried out by poorly qualified and untrained execution team members. As this information has come to light, it has revealed a “pervasive lack of professionalism” in the selection, training, and oversight of those carrying out executions. *See Morales v. Tilton*, 465 F.Supp. 2d 972, 980 (N.D. Cal. Nov. 27, 2006) (describing the administration of California’s lethal injection process); Amicus Brief for Michael Morales, Michael Taylor, et al., at 8-17.

Second, the majority of states delegate drafting of the protocols to an agency such as the department of corrections without the input or involvement of publically accountable legislators. This has led to secrecy within state governments. *See* ACLU-Rutherford Amicus Brief, at 14. In some instances, prison officials charged with developing lethal injection protocols were exempt from the requirements of state administrative law, that is, the law that subjects agency regulations to public comment and scrutiny before they can be adopted. For example, in *Hill*, the Supreme Court noted that Florida’s lethal injection protocols “appear exempt from Florida’s Administrative Procedure Act.” 126 S.Ct. at 2100. The trial court in *Bowling* determined that the Kentucky Department of Corrections was exempt from that state’s statute. *Bowling v. Ky. Dep’t of Corr.*, No. 06-CI-00574 (Ky. Franklin Cir. Ct. Dec. 27, 2006.) In other states, prison officials proceeded as if they were exempt from these laws, and challenges to their insistence upon secrecy have been raised both in the lethal injection civil rights actions and in separate law suits brought under state administrative procedures legislation. A superior court in California recently declared that the State’s revised lethal injection protocols were void because the Department of Corrections and Rehabilitation was not exempt from California’s Administrative Procedures Act, and the Department had failed to comply with its provisions before adopting the new protocols. *See Morales v. California Department of Corrections and Rehabilitation*, Marin Co. Superior Court Case No. CV061436, Oct. 31, 2007.

States and the federal government have concealed the execution process itself, shielding witness from fully seeing what goes on during executions and masking the experience of the inmate through the use of the neuromuscular blocking agent, pancuronium bromide. *See* answers to questions 9, 10, and 11, above, and ACLU-Rutherford Amicus Brief, at 18. Nearly all jurisdictions paralyze inmates before injecting them with the potassium chloride, and the risk – and occurrence – of conscious pain or suffering is often not apparent to execution witnesses.

See Morales v. Tilton, 464 F.Supp.2d at 975, 980; Denno, *Lethal Injection Quandary*, 76 Fordham L. Rev at 55-56. Lawsuits have been filed by various media outlets and organizations such as the ACLU, alleging that the use of pancuronium bromide makes it impossible for witnesses to determine whether inmates are experiencing substantial pain and suffering during their execution. *See, e.g., Pacific News Service v. Woodford* (filed March 8, 2006) (N.D. Calif. 2006). The curtain in execution chambers, which is drawn and opened at the sole discretion of the warden, also prevents witnesses from observing the entire execution process. Often, the curtain is not opened until after the IV lines are inserted, and are closed at the first sign of trouble. *See* ACLU-Rutherford Amicus Brief, at 19-21. The use of separate rooms also prevents witnesses from seeing which chemicals are being injected and by whom, and does not permit an evaluation of whether states are following their own protocols. *Id.* at 21.

Finally, data and records collected during the execution procedure and autopsy reports are not generally made public and do not allow an evaluation of the painlessness of the procedure or adherence to the protocol. *See* ACLU-Rutherford Amicus Brief, at 22-23. Most states do not release post-execution records, including autopsy reports, toxicology reports, execution logs, and photographs, or release them only under court order and under seal. *Id.* For the remainder of the states, the important information that could be revealed about execution procedures remains secret. When these records have become public, as in California, they have sometimes revealed evidence that inmates were inadequately anesthetized. *See* Amicus Brief for Michael Morales, Michael Taylor, et al., at 34-35.

For more information on the lack of transparency in the drafting and administration of lethal injection procedures, *see* Amicus Brief for the American Civil Liberties Union, the ACLU of Kentucky, and the Rutherford Institute.

19. What positions do medical professionals take with regard to physician participation in capital punishment?

The American Medical Association (AMA) has not taken a position on the death penalty. However, the AMA's Code of Ethics (Ethical Guideline E-2-06) prohibits physician participation in executions. The prohibition is broadly defined and includes advising, assisting, or supervising those who carry out executions and prescribing, preparing, administering or monitoring the administration of the chemicals or monitoring the condition of the inmate during the execution. The American Society of Anesthesiologists (ASA) has adopted the AMA's Code of Ethics and Ethical Guideline E-2-06. However, these prohibitions are not binding on individual physicians. Neither the AMA nor the ASA has disciplinary authority over physicians who participate in executions. As a result, physician participation is currently a matter of personal ethics for each individual physician. Many doctors believe, contrary to the AMA's position, that it is their ethical duty to participate in executions in order to ensure that they are performed properly. And some states even have statutes that protect doctors who participate in executions from any licensing consequences as a result of their participation.

There are medical professionals, including anesthesiologists, who have expressed a willingness to participate in executions by lethal injection. *See* Amicus Brief of Michael Morales, Michael Taylor, et al., at 7 n. 6 (citing, *e.g.*, David Waisel, *Physician Participation in Capital Punishment*, 82 Mayo Clinic Proceedings 1073, 1078 (2007) (discussing risks inherent in the three-drug formula and arguing, from the perspective of a physician, that doctors should

participate in executions); Atul Gawande, *When Law and Ethics Collide – Why Physicians Participate in Executions*, 354 *New Eng. J. of Med.* 1221, 1229 (2006) (reporting reasons why doctors participate in executions and describing interviews with four doctors and one nurse who have participated in at least 45 executions); Neil Farber et al., *Physicians’ Willingness to Participate in the Process of Lethal Injection for Capital Punishment*, 135 *Annals of Internal Med.* 884, 884-890 (2001) (reporting that 41% of doctors surveyed would participate in executions and concluding that “[d]espite medical society policies, many physicians would be willing to be involved in the execution of adults”).

This willingness to participate is not merely theoretical, as doctors participate to varying degrees in many states’ executions. Examples include Dr. Doe, who prepared the drugs, inserted the IV, and supervised executions for Missouri and the federal government; doctors who recorded vital signs and declared death in California; doctors who have examined inmates’ veins for IV suitability in Alabama and other states; and doctors such as Dr. Dershwitz who have assisted states in designing or revising their execution protocols.

Despite the states’ demonstrated ability to recruit doctors, lethal injection jurisdictions have been resistant to employing doctors for the crucial task of monitoring anesthetic depth prior to and during the administration of pancuronium and potassium. Thus, they continue to rely on untrained prison personnel to carry out the complicated three-drug protocol. *See Amicus Brief for Michael Morales, Michael Taylor, et al.*, at 7-17.