
Synopses of
***Amicus Curiae* Briefs**

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Amicus Briefs Filed in Support of Petitioners*

- I. Brief for **Michael Morales, Michael Taylor, et al.**, filed by the Death Penalty Clinic, University of California, Berkeley, School of Law on behalf of four death row inmates who have pending lethal injection challenges, informing the Court about evidence uncovered in lawsuits across the country, which shows that jurisdictions have failed or refused to put reasonable procedures in place to prevent the foreseeable, unnecessary risks in the administration of the three-drug formula.
- II. Brief for the **Fordham University School of Law, Lewis Stein Center for Law and Ethics**, describing the history of the development of the three-drug lethal injection formula used in virtually every death penalty state.
- III. Brief of the **American Civil Liberties Union and the Rutherford Institute**, arguing that lethal injection executions, which violate the Eighth Amendment, have been “enabled by the lack of transparency surrounding lethal injections across the country.”
- IV. Brief of **Critical Care Providers and Clinical Ethicists**, informing the Court that “the medical and medical ethics communities have rejected the introduction of neuromuscular blocking agents” such as pancuronium bromide, because of the “significant risks” that they pose.
- V. Brief of **Drs. Kevin Concannon, Dennis Geiser, Carolyn Kerr, Glenn Pettifer, and Sheila Robertson**, veterinarians who explain that “Kentucky’s lethal injection protocol would not meet the minimum standards for the humane euthanization of animals,” and discuss the multiple risks involved in Kentucky’s execution procedures.
- VI. Brief of **Human Rights Watch**, arguing that the Court’s “Eighth Amendment jurisprudence has looked to international standards and practices in giving meaning to the prohibition against cruel and unusual punishment,” and that it should do so in deciding *Baze*.

* The following is a sample of the *amicus curiae* briefs filed in support of the petitioners. All of the briefs, in full, as well as briefs in support of neither party, can be found online at www.lethalinjection.org. The following text is taken verbatim from the “Interests of Amici” and “Summary of Argument” sections of the briefs, except that some footnotes have been omitted in interest of space.

Michael Morales, Michael Taylor, et al.

Interest of Amici

Amici Michael Morales, Michael Taylor, Vernon Evans, Jr., and John Gary Hardwick, Jr., are inmates sentenced to death by the States of California, Missouri, Maryland, and Florida, respectively. *Amicus* Taylor has a petition for certiorari pending before this Court that raises the question of the proper Eighth Amendment legal standard for lethal injection challenges.

Together, *amici* comprise a representative group of death row inmates who have filed civil rights actions challenging the means and manner by which they are likely to be executed. Through discovery, *amici* have uncovered evidence of serious flaws in the lethal injection procedures in their respective jurisdictions. Because prison officials have traditionally shrouded the details of the administration of their execution procedures in secrecy, much of this information has not previously been available to the public. In addition, because many jurisdictions employ similar lethal injection protocols, *amici* have looked to jurisdictions around the country for information relevant to their respective challenges, and are aware of the evidence discovered in those jurisdictions. By virtue of their litigation, *amici* and their counsel can provide a needed perspective, one that would not otherwise be known to the Court, regarding lethal injection protocols and the various means by which departments of correction implement those protocols.

Summary of Argument

Execution by lethal injection can be performed constitutionally. The three-drug formula employed in almost all jurisdictions can result in humane executions, but only if administered properly, with the precision and care the use of such drugs requires. Because the drugs used are so volatile, and will inflict excruciating pain and suffering on inadequately anesthetized inmates, the question is whether jurisdictions that employ lethal injection have put in place reasonable procedures to effectuate a humane execution and to deal with the foreseeable problems with this method of execution. This brief argues that many of them have not done so. Instead, they have turned a blind eye to these foreseeable problems, allowing ignorance and neglect – rather than science and deliberation – to guide the formation and implementation of lethal injection protocols. The result has been botched executions that are entirely predictable and preventable.

To fully appreciate the reality of how lethal injection has been administered, one must look at the entire landscape of lethal injection challenges and, in particular, the information revealed in discovery following the Court's rulings in *Nelson v. Campbell*, 541 U.S. 637 (2004) and *Hill v. McDonough*, 126 S. Ct. 2096 (2006). Unfortunately, compelling examples of incompetent administration are currently under protective order. Nevertheless, information that *is* public reveals a “pervasive lack of professionalism,” *Morales v. Tilton*, 465 F. Supp. 2d 972, 980 (N.D. Cal. 2006), in the development and administration of lethal injection protocols in this country. This lack of professionalism makes it inevitable that some inmates will suffer torturous deaths.

As this Court contemplates the appropriate Eighth Amendment standard to adjudicate lethal injection challenges, it should be aware of the flawed practices documented in the records of litigation across the country. The legal standard this Court sets should take account of the multitude of problems these records reveal, and it should allow lower courts to continue what they have already been doing: adjudicating the facts of each case to determine whether the risks that the inmate will experience pain or conscious suffering are sufficient to violate the Eighth Amendment. The vast majority of these courts have applied the “unnecessary risk” standard the Petitioners urge in this case. That framework has enabled courts to evaluate the often appalling evidence revealed in discovery and to differentiate between risks that are the foreseeable result of deficient procedures, and risks that are unavoidable even in carefully constructed procedures, or too remote to be constitutionally significant.

The secrecy surrounding executions, the failure to record relevant data, and the protective orders in place in many jurisdictions make it impossible to exhaustively or reliably catalogue the problems that have occurred during lethal injections. Additionally, because each jurisdiction has chosen to paralyze inmates before injecting them with potassium chloride, the risk – and reality – of conscious pain or suffering is often not readily apparent. Yet publicly available evidence does demonstrate that executions are often conducted in a haphazard manner by unfit personnel, and that numerous failures have led to substantial uncertainty regarding whether the drugs in many executions were properly administered. Each step of the procedure can go awry, with disastrous (but often unseen) consequences, when prison officials disregard or ignore the inherent risks of the three-drug formula. In short, this brief describes what is known to have gone awry, and why.

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The Fordham University School of Law Lewis Stein Center for Law and Ethics

Interests of Amicus

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

The use of lethal injection as a method of execution raises a host of ethical questions important to the Stein Center that are enlightened by a review of the history of execution methods generally and lethal injection in particular. On the one hand, the history suggests, not surprisingly, a public consensus opposed to the infliction of severe pain in the course of executing individuals who were sentenced to death. On the other hand, the history raises doubts whether legal institutions, including state legislators, prison officials, and courts, have responded ethically to the serious and unnecessary risks associated with current lethal injection procedures.

Summary of Argument

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

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

(2) At one level, the current legislative trend towards the use of lethal injection was propelled by a search for a more humane alternative to the cruelty of existing execution methods. The historical evidence demonstrates, however, that lethal injection *as actually practiced* is not the result of informed deliberation or reasoned consensus. The three-drug lethal injection protocol first was developed in Oklahoma in 1977 without

study or qualified scientific or medical input. Soon thereafter, state after state blindly followed Oklahoma's lead. Moreover, the responsibility for the essential details of implementing lethal injection—what drugs should be used, what dosage amount, who should administer the drugs and how—was delegated by state legislatures to uninformed prison personnel. Hidden from public scrutiny and oversight, state prison personnel were often guided by unqualified sources. Thus states—including Kentucky—developed and adopted the nearly ubiquitous three-drug lethal injection protocol and procedures quickly, haphazardly, and without relevant medical or scientific input.

(3) Several features of the history of lethal injection have led to the *continued* repression of genuine scrutiny of the procedure and its implementation. Historical and structural factors have largely shielded lethal injection from the kind of public scrutiny that has led states in the past to reform execution methods. Thus, while the prevalence of both the three-drug protocol and its flawed implementation might at first glance suggest societal acceptance of the unnecessary risks that exist today, history exposes that premise as a fallacy. Although there is a consensus that the states should strive to make executions free from unnecessary pain and suffering, there is no reasoned consensus that current lethal injection procedures meet this goal. In this context, judicial scrutiny must ensure that states' administration of lethal injection eliminates the significant and unnecessary risk of serious pain.

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The American Civil Liberties Union and The Rutherford Institute

Interests of *Amici*

The American Civil Liberties Union (ACLU) is a nationwide, nonprofit, nonpartisan organization with more than 500,000 members dedicated to the principles of liberty and equality embodied in the Constitution. The ACLU of Kentucky is one of its statewide affiliates. *Amici* respectfully submit this brief to assist the Court in resolving serious questions regarding the constitutionality of the protocols used in lethal injection executions. Given its longstanding interest in the protections contained in the Constitution, including the Eighth Amendment's prohibition against cruel and unusual punishment, the proper resolution of those questions is a matter of substantial importance to the ACLU and its members.

The Rutherford Institute is an international civil liberties organization headquartered in Charlottesville, Virginia. Founded in 1982 by its President, John W. Whitehead, the Institute specializes in providing free legal representation to individuals whose civil liberties are threatened or infringed and in educating the public about constitutional and human rights issues. Attorneys affiliated with the Institute have filed briefs as an *amicus* of this Court on numerous occasions. Institute attorneys currently handle over one hundred cases nationally, including many cases that concern the interplay between the government and its citizens.

Among the purposes of The Rutherford Institute is to foster respect for the uniqueness and paramount worth of human life and to stridently defend fundamental notions of fairness and equality under the law. These values are deeply rooted in America's constitutional tradition and its morality and values, dating back to the Declaration of Independence. It also finds its roots in an informed citizenry that has the knowledge to hold its government accountable. The Rutherford Institute believes that this case concerns fairness and equality in the application of the death penalty, and is vitally important to constitutional jurisprudence and the growth and progress of the nation.

Summary of Argument

Amici endorse petitioners' claim that the Eighth Amendment bars the state from employing a method of execution that involves the gratuitous infliction of pain.¹ Rather than repeat those arguments, however, this brief focuses on how that Eighth Amendment violation has been enabled by the lack of transparency surrounding lethal injections across the country.

Lethal injection procedures and executions have been, and continue to be, shrouded in secrecy. This shroud of secrecy exists on four levels. First, the procedures

¹ As petitioners demonstrate, despite the shroud of secrecy surrounding lethal injection protocols, the available facts compel the conclusion that the protocols carry an unnecessary risk of inflicting pain on the condemned.

that states use during an execution are often kept confidential, protected from public scrutiny. Even lawyers involved in litigation challenging lethal injection and newspapers have been unable to glean critical information from the states about how lethal injection executions are carried out. Second, secrecy reigns even within state governments. The responsibility for creating lethal injection procedures is often delegated to corrections officials without discussion, study, or oversight by democratically accountable representatives. Third, even during executions, witnesses are prevented from seeing all that is occurring. Sometimes curtains physically block the witnesses' view of the inmate and sometimes the physical layout of the execution chambers makes it impossible for the witnesses to know what the state is injecting, who is injecting it, and how quickly it is being injected. Fourth, all but two states have maintained complete secrecy surrounding post-execution records and autopsies. The records kept during executions and the autopsies performed after contain data critical to evaluating the painlessness and humaneness of lethal injection executions, but states refuse to release this information.

The fact that lethal injection is shrouded in secrecy helps to explain why state after state has adopted this method of execution without study or reflection. Transparency in government is a critical aspect of our democracy, and it helps to ensure that public policy accords with contemporary values and civilized standards of decency. The near-total secrecy surrounding lethal injection has unsurprisingly led to a method of execution that poses an unnecessary risk of excruciating pain. Because that outcome is inconsistent with contemporary values and civilized standards of decency, it violates the Eighth Amendment and should be enjoined.

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Critical Care Providers and Clinical Ethicists

Interests of Amici

Amici curiae are physicians, professors of medicine, clinical ethicists, and other health care providers who specialize in critical care medicine, medical ethics, and end-of-life care. *Amici curiae*, each of whom is listed above, respectfully submit their brief to provide the Court with a medical ethics perspective on the use of pancuronium bromide, the second of the three-drug protocol used by the Commonwealth of Kentucky for carrying out lethal injections.

Dr. Robert D. Truog is Professor of Medical Ethics and Anesthesiology (Pediatrics) at Harvard Medical School and a Senior Associate in Critical Care Medicine at Children's Hospital Boston. Dr. Truog is an expert in the ethical issues that arise in anesthesia and critical care, and the author of national guidelines for providing end-of-life care in the intensive care unit. Dr. Truog serves as the Director of Clinical Ethics in the Division of Medical Ethics and the Department of Social Medicine at Harvard Medical School; a member of the Harvard Embryonic Stem Cell Research Oversight Committee; and a member of the Harvard University Faculty Committee of the Edmond J. Safra Foundation Center for Ethics. He received The Christopher Grevnik Memorial Award from the Society of Critical Care Medicine for his contributions and leadership in the area of ethics.

Dr. Jeffrey Burns, MD, MPH is the Chief of the Division of Critical Care Medicine at Children's Hospital Boston; the Edward & Barbara Shapiro Chair of Critical Care Medicine; and an Associate Professor at Harvard Medical School. Dr. Burns co-authored national guidelines for providing end-of-life care in the intensive care unit.

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Dr. Marion Danis, MD is Head of the Section on Ethics and Health Policy in the Department of Bioethics in the Clinical Center of the National Institutes of Health as well as the Chief of the Bioethics Consultation Service at the Clinical Center. Her publications include *ETHICAL DIMENSIONS OF HEALTH POLICY* published by Oxford University Press.

Judith Johnson is a member of the Children's Hospital Boston Ethics Advisory Committee; an Associate Clinical Ethicist at Children's Hospital; a member of the Harvard Ethics Leadership Group; and a faculty member for the annual Harvard Bioethics Course. She is a co-author of a *New England Journal of Medicine* article regarding pharmacologic paralysis and the withdrawal of mechanical ventilation at the end of life.

Dr. Bernard Lo, MD is Professor of Medicine and the Director of the Program in Medical Ethics at the University of California San Francisco. He chaired a national Expert Panel to Develop Clinical, Ethical, and Policy Recommendations Regarding Care

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Dr. Cynda Hylton Rushton PhD, RN, FAAN is Associate Professor of Nursing and Pediatrics at Johns Hopkins University School of Nursing; chair of Maryland's Council on Quality Care at the End of Life; a faculty member at the Berman Institute of Bioethics; Program Director at the Harriet Lane Compassionate Care Program at Johns Hopkins University and Children's Center; and Co-Chair of the Ethics Committee and Consultation Service at Johns Hopkins Hospital. She was a Kornfeld Fellow in end-of-life, ethics, and palliative care and was awarded the American Association of Critical-Care Nurses Pioneering Spirit Award for her work in advancing palliative care.

Summary of Argument

Pancuronium bromide, the second drug in the three-drug protocol used by the Commonwealth of Kentucky, is a neuromuscular blocking agent that paralyzes all muscles under a person's voluntary control. Neuromuscular blocking agents serve narrow functions in clinical medicine. Anesthesiologists use such agents during the induction of anesthesia to insert a breathing tube through the patient's mouth down into the trachea, and during some surgical procedures to ensure that the patient's body remains completely still. These agents are also used in limited circumstances in the intensive care setting, including, for example, to facilitate the use of mechanical ventilation equipment.

The Commonwealth of Kentucky has asserted that the administration of pancuronium bromide in the lethal injection procedure serves the aesthetic purpose of masking muscle movements such as convulsions or gasps that witnesses may perceive as

suffering. The medical community has considered this aesthetic rationale for administering neuromuscular blocking agents in end-of-life care where a terminally ill patient's body may exhibit similar movements after the withdrawal of life support. For a number of reasons, the medical and medical ethics communities have rejected the introduction of neuromuscular blocking agents for this purpose.

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. For example, drugs like pancuronium bromide may suppress the visual signs of acute air hunger associated with the withdrawal of a ventilator, leaving the patient to endure the agony of suffocation in silence and isolation. In light of these risks, the medical community has concluded that it is medically and ethically inappropriate to use pancuronium bromide or other paralytic agents for aesthetic purposes during the withdrawal of life support.

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Interests of Amici

Drs. Kevin Concannon, Dennis Geiser, Carolyn Kerr, Glenn Pettifer and Sheilah Robertson (the “Veterinary Amici”) respectfully submit this brief of *amici curiae* in support of Petitioners Ralph Baze and Thomas C. Bowling. Consent of Petitioners’ counsel and Respondents’ counsel has been obtained for the filing of this brief.

The Veterinary Amici are experienced veterinarians, with extensive knowledge regarding veterinary anesthesia. They regularly face issues regarding the humane euthanasia of animals. They also have specific expertise regarding the chemicals used by the State of Kentucky in lethal injections, including the limitations and effects of these chemicals in euthanizing animals.

Dr. Kevin Concannon is a veterinarian and a diplomate of the American College of Veterinary Anesthesiologists. During nearly 20 years as a practicing veterinarian, he has taught veterinary anesthesia and served as a supervisor of clinical anesthesia at both the University of California - Davis and North Carolina State University College of Veterinary Medicine. He has worked for the past ten years as an emergency/critical care clinician, anesthesia consultant and hospital director at the Veterinary Specialty Hospital of the Carolinas.

Dr. Dennis Geiser is a veterinarian and a diplomate of the American Board of Veterinary Practitioners. He is a professor of veterinary science at the University of Tennessee and the Assistant Dean of Organizational Development and Outreach at the College of Veterinary Medicine at the University of Tennessee. Dr. Geiser teaches equine respiratory disease and large animal anesthesia, conducts clinical work in anesthesiology and pain management, and conducts research in pain management, balance of anesthesia in animals and local and regional anesthesia.

Dr. Carolyn Kerr is a veterinarian and a diplomate of the American College of Veterinary Anesthesiologists. She has a D.V.Sc. in Veterinary Anesthesia and a Ph.D. in Physiology. Dr. Kerr is currently an associate professor at the Ontario Veterinary College at the University of Guelph. She has practiced veterinary medicine for 18 years and has lectured in veterinary anesthesia, pain management and euthanasia for the last 7 years to veterinary students and researchers at the University of Guelph.

Dr. Glenn Pettifer is a veterinarian and has a D.V.Sc. in veterinary anesthesiology. He is a diplomate and an executive board member of the American College of Veterinary Anesthesiologists. He currently practices veterinary anesthesiology at the Veterinary Emergency Clinic in Toronto, Canada. Dr. Pettifer formerly taught veterinary anesthesiology and pain management at Louisiana State University, and was later the Chief of Anesthesia Service there.

Dr. Sheilah Robertson is a specialist in veterinary anesthesiology and pain

management. She is a diplomate of the European and American Colleges of Veterinary Anesthesia and is currently a professor in the section of anesthesia and pain management at the University of Florida's College of Veterinary Medicine. She has published widely on the stress response to anesthesia in horses and on the alleviation of pain in many species.

Based on their years of experience in the field of veterinary anesthesia and pain management, the Veterinary Amici respectfully present the Court with information concerning the methods by which humane euthanasia is achieved in animals, and the difficulties involved in achieving humane euthanasia using the chemicals and procedures called for in Kentucky's lethal injection protocol.

Summary of Argument

Humane euthanasia

The term euthanasia comes from the Greek words "eu" and "thanatos," which combined mean "well death" or "dying well." The primary goal of veterinarians who euthanize animals is to achieve death humanely, avoiding needless pain and suffering of the patient. *See* Ky. Rev. Stat. § 258.095(12) ("'[E]uthanasia' means the act of putting an animal to death in a humane manner . . ."). To this end, veterinarians carefully consider the characteristics of the drugs that may be administered for the purpose of euthanasia, avoiding those that would cause unnecessary pain.

Euthanasia can be divided into two parts: (1) rendering an animal unconscious, followed by (2) inhibition of brain, heart, or both brain and heart function. An unconscious, properly anesthetized animal will not undergo physical or mental distress during the euthanasia process. Intravenous injection of an anesthetic drug most reliably and commonly produces this state of unconsciousness. Injection of increasing amounts of an anesthetic produces changes to a patient's mental state from light sedation, to unconsciousness, to profound brain depression and death. In clinical practice, veterinary anesthesiologists use the term "surgical plane of anesthesia" to define a particular point in the middle of this progression characterized by unconsciousness, loss of reflex muscle response, and attenuation of the stress responses of the body. Veterinarians take care to keep their patients in or beyond the surgical plane of anesthesia during the euthanasia process.

The preferred method for humane euthanasia by veterinarians – and the one required under Kentucky law – involves the use of a euthanasia solution that contains a single drug, sodium pentobarbital. 201 Ky. Admin. Regs. 16:090 § 5(1). Sodium pentobarbital is a long-acting anesthetic that quickly places the patient in a deep, surgical plane of anesthesia when injected intravenously. An overdose of sodium pentobarbital causes the patient to move past a surgical plane of anesthesia to profound brain depression resulting in death. Significantly, all this occurs with only transient and minimal pain to the patient associated merely with the venipuncture itself because the patient is unconscious.

As explained herein, Kentucky's current lethal injection protocol would not meet the minimum standards for the humane euthanization of animals.

The Kentucky lethal injection protocol

Kentucky's protocol does not call for the use of sodium pentobarbital. Rather, the best available information about Kentucky's protocol suggests that death is achieved by the intravenous injection of three different drugs. Specifically, the inmate first is injected with three grams of sodium thiopental, which is an "ultra short-acting barbiturate" intended to anesthetize – but not kill – the inmate. *Baze v. Rees*, No. 04-CI-01094, 2005 WL 5797977 (Ky. Cir. Ct. July 8, 2005), J.A. 762. Following a saline flush, the inmate is injected with fifty milligrams of pancuronium bromide, a neuromuscular blocking agent used to paralyze the inmate's voluntary muscles. *See id.* at 763-64. After another saline flush, the inmate is finally administered two hundred and forty milliequivalents of potassium chloride, which results in an alteration in impulse generation in the heart, leading to cessation of cardiac activity and directly causing death. *Id.*

Two of the three drugs used in the Kentucky protocol – pancuronium bromide and potassium chloride – cause severe pain and suffering when administered to a patient who is conscious. For that reason, many states, including Kentucky, do not allow pancuronium bromide to be used to euthanize animals, and veterinary standards prohibit the use of potassium chloride unless a patient is unconscious. This unconsciousness must be maintained throughout the euthanasia process.

Although Kentucky's protocol provides for an initial injection of anesthetic in the form of sodium thiopental, there is a danger that this injection is insufficient to achieve or maintain the state of unconsciousness a veterinarian would require before using potassium chloride to euthanize an animal. Sodium thiopental is an ultra short-acting barbiturate whose anesthetic effects wear off quickly. If there is any delay during an execution and no additional dose of sodium thiopental is administered, there is a risk that the drug's effects will diminish, resulting in the inmate being conscious at the time the other two drugs are administered and experiencing pain from those drugs. Moreover, even without a delay, the duration of the anesthetic effect of the sodium thiopental will be abbreviated if the proper dose is not injected. (This is especially true if the predetermined three-gram dose, which is given to all inmates without any consideration for their weight, proves insufficient.) The likelihood of an inappropriate dose of sodium thiopental is increased when those individuals responsible for the administration of the drug during an execution are not specifically trained to administer such anesthetics.²

The risk of inappropriate depth of anesthesia prior to the administration of pancuronium bromide and potassium chloride is aggravated by the fact that the Kentucky protocol does not allow for the assessment necessary under veterinary standards to determine whether a surgical plane of anesthesia has been reached or exceeded. Kentucky protocol does not require an individual trained in anesthesiology to determine that the inmate is unconscious before the injection of either pancuronium bromide or potassium chloride, let alone both. Unlike standard practice in veterinary medicine, there appears to be no requirement in Kentucky that the inmate be observed, or that executioners monitor or perform any tests on the inmate, during the execution process.

² Although greater doses of sodium thiopental may decrease the risk that its anesthetic effects will wear off, there exist other anesthetics (such as sodium pentobarbital) whose half-lives are much longer.

To the contrary, publicly available information regarding lethal injection procedures indicates that there is no observer – much less a trained observer – in close enough proximity to the inmate to determine the plane of anesthesia. In contrast, a veterinarian euthanizing an animal continuously evaluates a number of physiologic parameters to ensure that the animal is anesthetized to an appropriate depth before administering a drug that causes the animal's death. This evaluation requires constant contact with, and monitoring of, the patient to confirm that the proper level of anesthesia is maintained.

Further complicating the evaluation of an individual's depth of anesthesia is the use of a neuromuscular blocking agent, such as the pancuronium bromide used in the Kentucky protocol. In the context of veterinary euthanasia, pancuronium bromide is unnecessary to bring about death. The Veterinary Amici are unaware of any veterinarian or veterinary group that advocates the use of neuromuscular blocking agents during the euthanasia procedure. Because pancuronium bromide paralyzes the patient, it inhibits the veterinarian's ability to determine the patient's level of consciousness. A patient who has been injected with pancuronium bromide would appear to the eye to be anesthetized when in fact the patient could be fully conscious of the pain suffered as a result of the potassium chloride injection. In addition, pancuronium bromide itself would cause suffering in an inadequately anesthetized patient. As a neuromuscular blocker, pancuronium bromide inhibits all of the patient's voluntary muscular functions, including breathing. If a patient is injected with pancuronium bromide before reaching a surgical plane of anesthesia, the patient will experience the feeling of suffocation while conscious.

In sum, Kentucky's procedures for lethal injection do not meet the minimum standards of care used by veterinarians to provide for the humane euthanization of animals. Based on their vast experience with euthanasia and the drugs involved in the Kentucky lethal injection protocol, the Veterinary Amici offer the information herein to assist the Court in determining whether inmates sentenced to death are subjected to a foreseeable danger of unnecessary pain and suffering during the execution process under Kentucky's current protocol.

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Human Rights Watch

Interests of Amicus

Human Rights Watch is a non-governmental organization established in 1978 to monitor and promote observance of internationally recognized human rights. It has Special Consultative Status at the United Nations, regularly reports on human rights conditions in the United States and more than seventy other countries around the world, and actively promotes legislation and policies worldwide that advance protections of domestic and international human rights and humanitarian law. *Amicus* has extensively researched lethal injections in the United States and published a report on the matter. *So Long as They Die: Lethal Injections in the United States*, Human Rights Watch (Human Rights Watch, New York, N.Y.) (April 2006).

Because amicus has unique expertise in the intersection between these areas of law and the Eighth Amendment, it submits its brief to assist the Court in resolving this case.

Summary of Argument

Lethal injection has been touted as the most humane method of execution, and to a layman, the claim is appealing. The methodology mimics controlled medical procedures and even evokes the euphemistic “putting to sleep” characterization of animal euthanasia. The reality is considerably less predictable and, at times, the equivalent of torture.

State and federal courts across the country have faced a deluge of challenges to the three-drug protocol used by every State that approves lethal injection as a method of execution. Even before the Court approved § 1983 claims in *Hill v. McDonough*, 126 S. Ct. 1096 (2006), mounting evidence revealed serious flaws in the three-drug lethal injection protocol. Since prisoners have been able to bring § 1983 challenges, evidentiary records in those proceedings support the claims of opponents that the three-drug protocol is inherently flawed and likely to cause severe pain and suffering.

Although the evidence has been consistent, lower courts’ decisions have been varied and unpredictable, primarily because they lack guidance on the appropriate legal standard to apply to Eighth Amendment method-of-execution claims. This Court has not directly addressed such a claim in over a century. Fortunately, international human rights law provides a clear and practicable standard—whether the method of execution utilized inflicts the minimum possible pain and suffering.

The international standard is unambiguous and supported by this Court’s Eighth Amendment jurisprudence. By contrast, the standard applied by the Supreme Court of Kentucky—whether the method of execution bears a substantial risk of the wanton infliction of unnecessary pain—is unworkable. It fails to provide meaningful guidelines that comply with international human rights law and the Eighth Amendment.

The history of Kentucky's adoption of its current three-drug lethal injection protocol reveals a legislature acting with the intent to adopt a method of execution more humane than electrocution. Nevertheless, both the legislature and the Department of Corrections, the State entity charged with developing and implementing the lethal injection protocol, failed to conduct any research to ensure that the three-drug protocol was in fact less likely to cause pain and suffering than electrocution. Nor did the Kentucky Legislature and Department of Corrections consider substantial evidence that other States' experience with the three-drug protocol proved that the protocol was inherently flawed and likely to cause excruciating pain.

Kentucky must address this dearth of research and evaluate the three-drug protocol it utilizes in executions. If independent research reveals that its current protocol does not minimize pain and suffering, Kentucky must implement the alternative that does so.

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