SUPREME COURT OF TENNESSEE AT NASHVILLE

No. M2003-01767-SC-R11-CV

ABU-ALI ABDUR'RAHMAN PLAINTIFF-APPELLANT,

v.

PHIL BREDESEN, ET AL. DEFENDANT-APPELLEE.

Opinion Filed: October 17, 2005

Appeal from the Court of Appeals of Tennessee. (No. M2003-01767-COA-R3-CV). Honorable William C. Koch, Jr., William B. Cain, and Frank G. Clement, Jr., Circuit Judges.

Before ANDERSON, Chief Justice, and DROWOTA, III, BIRCH, JR., HOLDER, and BARKER, J.J.

OPINION

ANDERSON, Chief Justice

We granted review to address several issues regarding the Tennessee Department of Correction's protocol for executing inmates who have been sentenced to death by lethal injection. After our review of the record and applicable authority, we conclude that the lethal injection protocol in Tennessee, which includes intravenous injections of sodium Pentothal, pancuronium bromide, and potassium chloride, (1) does not violate the Eighth Amendment to the United States Constitution or article I, section 16 of the Tennessee Constitution, (2) does not violate due process provisions under the United States or Tennessee Constitutions, (3) does not deny access to the courts in violation of the United States or Tennessee Constitutions, (4) does not violate the Uniform Administrative Procedures Act, (5) does not violate the Nonlivestock Animal Humane Death Act, (6) does not violate provisions governing the practice of medicine and provision of healthcare services, and (7) does not violate the Drug Control Act or Pharmacy Practice Act. Accordingly, we affirm the judgment of the Court of Appeals.

In 1987, Abu-Ali Abdur'Rahman, formerly known as James Lee Jones, ("petitioner"), was convicted of first degree murder and sentenced to death by a jury in Davidson County, Tennessee.¹ *State* v. *Jones*, 789 S.W.2d 545, 550 (Tenn. 1990). Because the petitioner's case has had a lengthy history in state and federal courts, we begin by summarizing the relevant procedural background.

BACKGROUND

State Court Proceedings

In February of 1986, the petitioner and a co-defendant entered the home of Patrick Daniels and Norma Norman under the guise of buying drugs. After binding and blindfolding the victims, the petitioner repeatedly stabbed Daniels in the chest while Daniels pleaded for his life, and he stabbed Norman several times in the back. Daniels died as a result of the stab wounds to his chest, but Norman survived. *Id.* at 550.

The jury imposed the death sentence for the killing of Daniels after determining that evidence of the following aggravating circumstances outweighed evidence of mitigating factors: the petitioner had a prior conviction for a felony involving the use of violence or the threat of violence to the person; the murder was especially heinous, atrocious, or cruel

¹ The petitioner was also convicted of assault with intent to commit first degree murder and armed robbery, for which he received consecutive life sentences. *Jones*, 789 S.W.2d at 545.

in that it involved torture or depravity of mind; and the murder was committed during the perpetration of an armed robbery. *Id.* at 552-53.

This Court affirmed the first degree murder conviction and death sentence on direct appeal in 1990. *Id.* at 553. The United States Supreme Court denied a writ of certiorari. *Jones v. Tennessee*, 498 U.S. 908 (1990).

After his direct appeal, the petitioner challenged his convictions and his death sentence by filing a petition for post-conviction relief. The trial court denied post-conviction relief, and the Court of Criminal Appeals affirmed. *Jones v. State*, 1995 WL 75427 (Tenn. Crim. App., Feb.23, 1995). This Court denied the petitioner's application for permission to appeal, *Jones v. State*, 1995 WL 75427 (Tenn., Feb. 23, 1995), and the United States Supreme Court again denied a writ of certiorari. *Jones v. Tennessee*, 516 U.S. 1122 (1996).

Federal Court Proceedings

In April of 1996, the petitioner initiated what have amounted to extensive and lengthy proceedings in federal court by filing a petition for writ of habeas corpus in the United States District Court for the Middle District of Tennessee. The district court found that the petitioner had been denied effective assistance of counsel during the sentencing phase of his trial, vacated the death penalty, and granted a new sentencing hearing. The district court further found that a prosecutorial misconduct issue could not be reviewed because the petitioner had not raised the issue in his application for permission to appeal to this Court. *Abdur'Rahman v. Bell*, 999 F.Supp. 1073 (M.D.Tenn. 1998).

On appeal, a divided panel of the Sixth Circuit Court of Appeals determined that the petitioner had not established prejudice from his counsel's ineffectiveness in the sentencing phase of the trial, reversed the district court's judgment, and reinstated the petitioner's death sentence. *Abdur'Rahman v. Bell*, 226 F.3d 696 (6th Cir.2000). The United States Supreme Court denied a writ of certiorari. *Abdur'Rahman* v. *Bell*, 534 U.S. 970 (2001).

After the denial of certiorari, the petitioner filed a motion seeking relief from the judgment in the district court and a motion seeking to vacate the judgment in the Sixth Circuit Court of Appeals. *See* Fed. R. Civ. P. 60(b). The petitioner alleged that the district court had erred in finding that the prosecutorial misconduct issue raised in the habeas corpus petition could not be reviewed.² The district court concluded that the petitioner's motion was a successive petition for habeas corpus relief that was precluded by 28 United States Code section 2444(b)(2). A divided panel of the Sixth Circuit affirmed. *See Abdur'Rahman v. Bell*, No. 98-6568/6569, 01-6504 (6th Cir., Jan. 18, 2002).

The United States Supreme Court initially granted the petitioner's petition for certiorari, *Abdur'Rahman v. Bell*, 535 U.S. 981 (2002), but then dismissed the appeal as improvidently granted. *Abdur'Rahman v. Bell*, 537 U.S. 88 (2002) (Stevens, J., dissenting). Thereafter, a majority of the Sixth Circuit, hearing the matter en banc, held that the petitioner had filed a proper motion for relief from the judgment in the district court under Rule 60(b) of the Federal Rules of Civil Procedure and that the motion was not a second or successive habeas corpus petition. *Abdur'Rahman* v. *Bell*, 392 F.3d 174 (6th Cir. 2004) (en banc). Although the majority remanded the case to the district court, the United States Supreme Court again intervened, this time granting the State's petition for writ of certiorari and remanding the case

² The motion asserted that the district court erred in concluding that the petitioner's failure to include the prosecutorial misconduct issue in his application for permission to appeal to this Court barred review of the issue in the habeas corpus proceeding. The motion pointed out that on June 28, 2001, this Court adopted Supreme Court Rule 39, which expressly stated that raising an issue in the application for permission to appeal is not required to exhaust state court review and thus preserve the issue for habeas corpus review.

to the Sixth Circuit for further consideration of the petitioner's motion under *Gonzalez v. Crosby*, ____ U.S. ____, 125 S. Ct. 2641 (2005). In *Gonzalez*, the Supreme Court held that a motion under Rule 60(b)(6) is not to be treated as a successive habeas petition if it does not assert, or reassert, claims of error in the movant's state conviction. *Id.* As a result of the foregoing, the petitioner's habeas corpus proceeding has remained pending in the federal court system for nearly ten years after he filed his petition.

Administrative Proceedings

On April 3, 2002, while federal habeas corpus proceedings were ongoing, the petitioner asked the Commissioner of Correction in Tennessee to issue a declaratory order regarding the "constitutionality, legality, and applicability" of the Tennessee Department of Correction's lethal injection protocol.³ The Commissioner denied the request on May 28, 2002.

Thereafter, on July 26, 2002, the petitioner filed the present action challenging the Department of Correction's lethal injection protocol in the Chancery Court for Davidson County under the Administrative Procedures Act. *See* Tenn. Code Ann. § 4-5-225 (1998). The petitioner alleged that the lethal injection protocol, which involves the use of sodium pentothal, pancuronium bromide ("Pavulon"), and potassium chloride, violated the Uniform Administrative Procedures Act, *see* Tenn. Code Ann. § 4-5-101 et. seq. (1998 & Supp.2004); violated the Open Meetings Act, *see* Tenn. Code Ann. § 8-44-104 (2002); is contrary to the Nonlivestock Animal Humane Death Act, *see* Tenn. Code Ann. § 44-17-301 (2004); requires the unlicensed practice of medicine; violates public policy in Tennessee; is cruel and unusual

³ At that time, the petitioner was facing an execution date of April 10, 2002, which was stayed by the United States Supreme Court when it granted the petitioner's petition for a writ of certiorari. *Abdur'Rahman v. Bell*, 535 U.S. 981 (2002).

punishment under the United States and Tennessee constitutions; and violates due process under the United States and Tennessee constitutions. The State moved to dismiss the non-constitutional allegations for failure to state claims upon which relief could be granted. *See* Tenn. R. Civ. P. 12.02(6).

After granting the State's motion to dismiss the nonconstitutional claims, the Chancellor held an evidentiary hearing on the constitutional claims. The evidence presented at the hearing by the petitioner and the State of Tennessee is summarized below.

Ricky Bell, the Warden of the Riverbend Maximum Security Institution where death row inmates are housed, was called to testify by both the petitioner and the State. He testified that in June of 1998, shortly after the legislature enacted lethal injection as a means of execution,⁴ the Commissioner of the Department of Correction appointed a committee to establish a lethal injection protocol. The committee consisted of Department of Correction officials but no physicians or medical personnel. The committee met four times between June of 1998 and October of 1998; the committee was not open to the public and did not solicit public feedback with regard to lethal injection.

Bell and the other committee members gathered information from other states regarding the lethal injection procedures, and they met with the United States Bureau of Prisons and prison officials in Indiana and Texas regarding the protocol. Bell also traveled to Texas to observe an execution carried out through lethal injection. Bell testified that the committee decided to adopt a lethal injection protocol

⁴ See Tenn. Code Ann. § 40-23-114 (2003). Although executions prior to this legislation were to be carried out through electrocution, the new provisions made lethal injection applicable to all inmates on death row except for those who took affirmative steps of choosing electrocution. *Id.*

that included the use of three drugs in the following doses and sequence: five grams of sodium Pentothal, which puts the inmate to sleep quickly; 100 milligrams of Pavulon, which stops the inmate's breathing; and 200 milligrams of potassium chloride, which stops the inmate's heart. Bell stated that the number of states using these drugs was "in the 30s," and that the dosages were based on the Texas protocol because that state has performed the most executions in the country. Bell conceded that he has no medical education or expertise with these drugs other than what he learned for the lethal injection process and that he has no specific knowledge regarding the effects of Pavulon.

Bell described the lethal injection process in detail. Bell obtains the drugs from the Special Needs Facility and keeps them in a storage area to which he has the only keys. Before an execution, Bell prepares two sets of seven syringes in the presence of other members of the execution team; each set includes one syringe of sodium Pentothal, two syringes of Pavulon, two syringes of potassium chloride, and two syringes containing saline. The syringes are numbered one through seven and color coded-yellow for sodium Pentothal, black for saline, blue for Pavulon, and red for potassium chloride. The second set of syringes is used only if there has been a problem with the first set.

Bell testified that an "extraction team" of correctional officers takes the inmate from his cell, straps him to a gurney, and rolls him into the death chamber just before a scheduled execution. An "IV team," which consists of two paramedics and one correctional officer, inserts a catheter above the inmate's elbow on both arms. The second catheter is used only if there is a problem with the first. After the catheters are inserted, the IV team members leave the room.

Bell explained that he selects a ranking prison official to serve as executioner; the executioner is not a physician and does not have medical training outside of the lethal injection training process. The executioner remains in a room adjacent to the death chamber. A window between the two rooms allows the executioner to see the inmate throughout the execution process; a camera immediately over the gurney also allows the executioner to "zoom in" and see the catheters. The IV catheters are connected to tubes that extend through a portal in the wall below the window. The color-coded syringes are in the executioner's room. When signaled by Bell, the executioner attaches each syringe and performs a "push" in the following sequence: a syringe of sodium Pentothal, a syringe of saline, two syringes of Pavulon, a syringe of saline, and two syringes of potassium chloride.

Bell stated that the lethal injection protocol contains backup procedures and that practice sessions are conducted monthly. If a paramedic on the IV team is unable to insert an IV catheter, for instance, a physician is on site to perform a "cutdown" procedure, i.e., a procedure in which the physician makes an incision allowing for insertion of the catheter in a larger artery. The decision to use a cutdown procedure as an alternative was based on protocols in other states. Similarly, Bell testified that the preparation of two sets of syringes assures there is an adequate supply of the drugs in the event of a clogged catheter line, vein blockage, or other failure. In such a case, the procedure calls for the executioner to start the syringe sequence from the beginning.

Finally, Bell testified that the lethal injection protocol had been used in the execution of Robert Glen Coe in April of 2000. Coe entered the execution chamber at 1:07 a.m. and the IV catheters were inserted by 1:21 a.m. After Bell spoke to the Commissioner to determine that the execution had not been stayed, the lethal injection drugs were injected at 1:32 a.m. Coe was pronounced dead at 1:37 a.m. According to Bell, who witnessed the entire execution, Coe did not appear to be in pain or discomfort after the executioner administered the drugs.

Dr. Mark J.S. Heath, a board certified anesthesiologist and assistant professor of anesthesiology at Columbia University in New York, testified on behalf of the petitioner. Dr. Heath testified that he became interested in the lethal injection process when reading about the drugs used in the federal government's execution of Timothy McVeigh.⁵ Dr. Heath thought it was "quite odd" that the federal government's lethal injection protocol included an ultrashortacting barbiturate (sodium Pentothal) with a long-acting paralyzing drug (Pavulon). Dr. Heath began educating himself on lethal injection protocols throughout the country, and he had testified against the use of certain drugs in cases in Louisiana and Georgia. He testified that Tennessee's lethal injection protocol is flawed in numerous respects.

First, Dr. Heath testified that Tennessee's lethal injection protocol, like that of the federal government and over thirty states, uses sodium Pentothal to induce general anesthesia, Pavulon to induce paralysis of skeletal muscles, and potassium chloride to cause death through cardiac arrest. Dr. Heath explained that Pavulon plays no role in causing death or expediting the lethal injection process. Moreover, because Pavulon does not affect one's involuntary muscles or the nervous system, there are "many problems" with using Pavulon:

[S]hould for any reason, and there are a number of reasons why this might occur, the Pentothal [is] inadequate to keep them asleep until the potassium kills them, then they would emerge from unconsciousness or experience consciousness while paralyzed, while suffocating and then experience the potassium being injected.

Dr. Heath testified that Pavulon creates "the real risk" of rendering the lethal injection process "unnecessarily inhumane." He explained that as a result of paralysis induced

⁵ Timothy McVeigh was sentenced to death and executed for his role in the 1995 bombing of a federal building in Oklahoma City that killed 165 people. *United States v. McVeigh*, 153 F.3d 1166 (10th Cir.1998).

by Pavulon, inmates being executed are unable to move if "discomfort or pain is occurring" and are unable to make "any facial expression" indicating their suffering. Moreover, Dr. Heath noted that Tennessee's protocol lacks instructions or procedures to ensure that inmates are in fact anesthetized from the sodium Pentothal prior to the injection of Pavulon. In sum, Pavulon creates a "chemical veil" that prevents witnesses from seeing or otherwise detecting the inmate's suffering.

Second, Dr. Heath criticized Tennessee's lethal injection protocol for lacking provisions to ensure the proper handling and administering of the three drugs used in the lethal injection process. He stated that the drugs are controlled substances that must be mixed, drawn, and administered in the proper concentration and volume according to complex calculations. Similarly, Dr. Heath testified that using a series of seven syringes was an "extraordinarily over-complex sequence," that there was no reason to include an injection of saline between the injections of Pavulon and the potassium chloride, and that the failure to label each syringe with the name of the specific drug contained therein was unacceptable.

Third, Dr. Heath criticized Tennessee's lethal injection protocol for lacking safeguards as to the insertion and monitoring of the IV catheter. He explained that the improper insertion of an IV catheter creates the risk of an extra-vascular injection or an infiltration, during which the drugs and fluids are not injected into the vein and are not delivered through the bloodstream. Dr. Heath explained that the IV injection site must be monitored closely not only by sight but also by feeling or palpating the area to discern swelling, puffiness, or leakage; as a result, it is "extremely uncommon" for the person monitoring the IV catheter and injecting the drugs to be in a room separate from the patient.

Similarly, Dr. Heath strongly criticized the Tennessee lethal injection protocol for using the "cutdown" procedure in cases where an IV catheter either cannot be inserted or has failed. He stated that the cutdown procedure is "rarely performed" in the practice of medicine, except in emergency trauma situations where a patient's central and peripheral veins have collapsed. Dr. Heath noted that although the lethal injection protocol provides for a physician to be on site during an execution, the protocol does not contain provisions for obtaining a physician who is experienced in the cutdown procedure. Moreover, in contrast to the cutdown procedure, Dr. Heath testified that a percutaneous technique, in which a needle is used to insert a thin wire and a catheter, is "much more widely used." He further stated that the percutaneous method decreases the risk of catastrophic bleeding, is quicker and easier to perform, and is easier to teach to others.

Dr. Heath conceded that he had never witnessed a lethal injection or consulted in the formulation of a lethal injection protocol. He also acknowledged that the federal government and over thirty states have lethal injection protocols that include sodium Pentothal, Pavulon, and potassium chloride, and that only two states, New Jersey and North Carolina, do not use this combination of drugs for lethal injection. Dr. Heath agreed that an injection of two grams of sodium Pentothal would cause unconsciousness in all but "very rare" cases and that an injection of five grams of sodium Pentothal "would almost certainly be fatal."

Carol Weihrer, president and founder of the Anesthesia Awareness Campaign, also testified on the petitioner's behalf. She stated that in January of 1998, she had surgery to remove an eye while under the effect of a neuromuscular blocking agent and while lacking sufficient anesthesia. As a result, she was aware of what was going on during the surgery, but she could not move or speak. She testified that the ordeal was terrifying and tortuous. She stated that she formed her organization to educate the public and medical practitioners about these issues.

Dr. Dennis Geiser, Chairman of the Department of Large Animal Clinical Sciences at the University of Tennessee College of Veterinary Medicine, also testified on behalf of the petitioner. A doctor of veterinary medicine, Dr. Geiser stated that he was familiar with the drugs used in the lethal injection process and the effects of each drug. He testified that Pavulon is a neuromuscular blocking agent which paralyzes an animal's diaphragm and causes breathing to cease. He stated that Pavulon, whether used alone or with other drugs, is not acceptable by the American Veterinary Medical Association for animal euthanasia for several reasons:

[T]he use of Pavulon could potentially produce an inhumane situation as it relates to animals if it's used in an euthanasia protocol, and I think one of the reasons for that is that ... it does cause respiratory arrest without causing central nervous system depression And if we cause asphyxiation using the Pavulon, but yet you [cannot] perceive that asphyxiation then this causes inhumane distress and pain for that particular animal It has no pain relief properties whatsoever and it does produce respiratory relief.

Dr. Geiser acknowledged that he was not a physician, that he had never used Pavulon on a person, and that Pavulon had other surgical uses.

Dr. Bruce Levy, the Chief Medical Examiner for the State of Tennessee and a County Medical Examiner in Davidson County, Tennessee, testified on behalf of the State. Dr. Levy testified that he is board-certified in anatomic pathology, clinical pathology, and forensic pathology. Several years earlier, he had discussed Tennessee's lethal injection protocol and the role of County Medical Examiner with Warden Ricky Bell. He had also reviewed the lethal injection procedures, toured the execution facilities, and spoken to medical examiners throughout the country who had experience with lethal injection.

Dr. Levy testified that sodium Pentothal, Pavulon, and sodium chloride have well-known effects: sodium Pentothal is an ultra-fast acting barbiturate that is used in general anesthesia; Pavulon is a neuromuscular blocking agent that prevents nerve impulses from contracting muscles; and potassium chloride is normally used to increase a patient's potassium level. Dr. Levy testified that an injection of five grams of sodium Pentothal would cause unconsciousness and death, and that a large dose of potassium chloride causes the heart to stop beating. He believed that an inmate given five grams of sodium Pentothal as provided in Tennessee's lethal injection protocol would feel no pain after the injections of Pavulon and potassium chloride. Dr. Levy stated that the inmate's death is caused by a combination of the three drugs and not only by the potassium chloride. He agreed that eliminating Pavulon would not decrease the effectiveness of the lethal injection process.

Dr. Levy testified that the insertion of an IV is normally a routine procedure that can be performed by paramedics. He also testified that a cutdown is a "minor surgical procedure" in which an incision is made before inserting a catheter directly into a large vein. He said that the procedure is still used by physicians.

Finally, Dr. Levy testified that as the medical examiner in Davidson County, Tennessee, he performed the autopsy on Robert Coe, who was executed by lethal injection in 2000.⁶ He said that the cause of Coe's death was an "acute intoxication" by the combination of sodium Pentothal, Pavulon, and potassium chloride. He said that, based on the levels of the drugs found in Coe's body, Coe would have been unconscious within seconds of being injected with sodium Pentothal and would have died within five minutes. Coe would not have regained consciousness and would not have experienced any pain or discomfort as a result of any of the three drugs.

⁶ Dr. Levy testified that the death of all prisoners is reported to the medical examiner in the county where the death occurred and that the medical examiner is authorized to order an autopsy on all homicides, regardless of the reason for the homicide.

Following the hearing, the Chancellor found that the petitioner "failed to demonstrate that Tennessee's method of lethal injection is unconstitutional." Although the Chancellor further found that the State did not establish "any need whatsoever for the injection of Pavulon," she concluded that the lethal injection process was nevertheless "reliable in rendering an inmate unconscious, if not dead, before the paralytical and lethal painful drugs take effect." The Chancellor thus concluded that the petitioner failed to show "that Tennessee's lethal injection method poses a reasonable likelihood of a cruel or inhumane death."

The Court of Appeals affirmed the Chancellor's ruling that Tennessee's lethal injection protocol was not cruel and unusual punishment in violation of the Eighth Amendment of the United States Constitution or article I, section 16 of the Tennessee Constitution. The Court of Appeals also affirmed the Chancellor's dismissal of all the remaining nonconstitutional claims raised by the petitioner.

We granted this appeal to review these issues.

CONSTITUTIONAL ISSUES

A constitutional claim that is resolved after an evidentiary hearing generally presents a mixed question of law and fact. *See Carpenter v. State*, 126 S.W.3d 879, 886 (Tenn. 2004) (ineffective assistance of counsel); *Jaco v. State*, 120 S.W.3d 828, 830 (Tenn. 2003) (voluntary guilty plea). On appeal, our standard of review is de novo with a presumption of correctness extended only to the lower court's findings of fact. *Carpenter*, 126 S.W.3d at 886; *see also State v. Webb*, 252 Conn. 128, 750 A.2d 448, 453 (2000) (cruel and unusual punishment).

Cruel and Unusual Punishment

The petitioner argues that Tennessee's lethal injection protocol amounts to cruel and unusual punishment under the Eighth Amendment to the United States Constitution and article I, section 16 of the Tennessee Constitution. He argues that the lethal injection protocol is inconsistent with contemporary standards of decency, that the use of Pavulon with sodium Pentothal and potassium chloride creates a risk of unnecessary physical and psychological suffering, and that the lethal injection protocol lacks written provisions or other appropriate safeguards and thus may cause unnecessary physical and psychological suffering. The State replies that the lethal injection protocol in Tennessee is the same as the protocol used by over thirty other jurisdictions and by the federal government and that the evidence failed to establish a risk of unnecessary physical or psychological suffering.

Although this Court has recently upheld the use of lethal injection as a constitutionally permissible means of imposing the death penalty, *see State v. Robinson*, 146 S.W.3d 469, 529 (Tenn. 2004), we have never addressed the issue of whether the specific protocol in Tennessee for executing a death sentence by lethal injection constitutes cruel and unusual punishment. As a result, we begin our analysis by reviewing the relevant constitutional provisions and related authorities.

The Eighth Amendment to the United States Constitution provides that "[e]xcessive bail shall not be required, no excessive fines imposed, nor cruel and unusual punishments inflicted." U.S. Const. amend. VIII. The language in article I, section 16 of the Tennessee Constitution is very much the same: "That excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted." Tenn. Const. art. I, § 16.

Nearly one hundred years ago, the United States Supreme Court recognized that the cruel and unusual punishments clause "is not fastened to the obsolete, but may acquire meaning as public opinion becomes enlightened by a humane justice." *Weems v. United States*, 217 U.S. 349, 378 (1910) (citations omitted). The Court has explained that the Eighth Amendment draws "its meaning from the evolving standards of decency that mark the progress of a maturing society." *Trop v. Dulles*, 356 U.S. 86, 100-01 (1958). Indeed, the Court has reasoned that "[b]y protecting even those convicted of heinous crimes, the Eighth Amendment reaffirms the duty of the government to respect the dignity of all persons." *Roper v. Simmons*, ____ U.S. ___, 125 S. Ct. 1183, 1190 (2005); see also Estelle v. Gamble, 429 U.S. 97, 102 (1976).

The United States Supreme Court has emphasized three factors in determining whether the severity of punishment imposed for an offense or upon a defendant or a class of \the Eighth Amendment: first, whether the punishment for the crime conforms with contemporary standards of decency; second, whether the punishment is grossly disproportionate to the offense; and third, whether the punishment achieves legitimate penological objectives. *See Roper*, 125 S. Ct. at 1190; *Atkins v. Virginia*, 536 U.S. 304, 311-12 (2002); *Solem v. Helm*, 463 U.S. 277, 292 (1983). This Court has also considered similar factors under article I, section 16 of the Tennessee Constitution. *See Van Tran v. State*, 66 S.W.3d 790, 800 (Tenn. 2001); *State v. Black*, 815 S.W.2d 166, 189 (Tenn. 1991).

The analysis is quite similar in cases where the challenge is not simply to the *type* of punishment but also to the *method* for carrying out the punishment. *See Webb*, 750 A.2d at 454 (analyzing whether methods of execution are cruel and unusual). The United States Supreme Court has considered, for instance: (1) whether a method of execution comports with the contemporary norms and standards of society; (2) whether a method of execution offends the dignity of the prisoner and society; (3) whether a method of execution inflicts unnecessary physical pain; and (4) whether a method of execution inflicts unnecessary psychological suffering. *Weems*, 217 U.S. at 373. These factors dictate that punishments may not include torture, lingering death, wanton infliction of pain, or like methods. *Estelle*, 429 U.S. at 102; *In re Kemmler*, 136 U.S. 436, 447 (1890).

Contemporary Standards of Decency and Dignity

In applying this framework, we begin with an analysis of whether the lethal injection protocol comports with standards of decency. In ascertaining contemporary "contemporary standards of decency," a court must look to "objective evidence of how our society views a particular punishment today." Van Tran, 66 S.W.3d at 800. The "most reliable objective evidence" of contemporary standards is most often found in legislation. Id.; see also Roper, 125 S. Ct. at 1190 (holding that contemporary standards reflected in legislation prohibits execution of juveniles); Atkins, 536 U.S. at 311-12 (holding that contemporary standards reflected in legislation prohibits execution of mentally retarded inmates). Accordingly, as the United States Supreme Court has repeatedly shown, "the clearest and most reliable objective evidence of contemporary values is the legislation enacted by the country's legislatures." Id. at 312 (quoting Penry v. Lynaugh, 492 U.S. 302, 331 (1989)).

Here, there is overwhelming evidence that lethal injection, which is commonly thought to be the most humane form of execution, is consistent with contemporary standards of decency. *See, e.g., Wheeler v. Commonwealth*, 121 S.W.3d 173, 186 (Ky. 2003); *Webb*, 750 A.2d at 458. Of the thirty-eight states that presently have capital punishment, approximately thirty-seven have legislation adopting lethal injection as the primary means of execution. *See Cooper v. Rimmer*, 358 F.3d 655, 659 (9th Cir. 2004); *Webb*, 750 A.2d at 457 (summarizing legislation in thirty-four states). Moreover, no court has ever held that lethal injection is cruel and unusual punishment in violation of the Eighth Amendment of the United States Constitution. *See Cooper*, 358 F.3d at 659; *Wheeler*, 121 S.W.3d at 186; *Webb*, 750 A.2d at 457-58.

In addition, the evidence in this case has established that Tennessee's lethal injection protocol is consistent with the overwhelming majority of lethal injection protocols used by other states and the federal government. The evidence revealed, for instance, that the Department of Correction formed a committee for establishing the protocol and then studied the protocols used throughout the country. As a result, the committee based its protocol on the lethal injection protocols used by other states and by the federal government.

The petitioner argues that we should not consider the strong evidence of protocols formulated by Departments of Correction in other states because they were not enacted by legislatures. We disagree. The protocols in every jurisdiction stem from legislation that created lethal injection as a method of execution; moreover, it is equally significant that the protocols have remained intact without legislative revision. Accordingly, we believe that evidence of the lethal injection protocols throughout the country is highly probative of the contemporary standards.

The petitioner also assails the inclusion of Pavulon in Tennessee's lethal injection protocol as being inconsistent with contemporary standards. While the Chancellor correctly observed that the State failed to show a legitimate reason for the use of Pavulon in the lethal injection protocol, the undisputed evidence before the Chancellor was that only two states do not use some combination of sodium Pentothal, Pavulon, and potassium chloride. Moreover, the Chancellor and the Court of Appeals correctly observed that the analysis under the Eighth Amendment of the United States Constitution and article I, section 16 of the Tennessee Constitution does not require consideration of whether other means of execution may be superior in some way or the result of a more updated study. Instead, the lower courts properly focused on the appropriate legal standard and concluded that the use of Pavulon does not violate contemporary standards of decency.

Accordingly, we agree that using Pavulon in the lethal injection protocol does not violate contemporary standards of decency.

Unnecessary Pain and Suffering

We next consider whether the lethal injection protocol offends either society or the inmate by the infliction of unnecessary physical or psychological pain and suffering.

The petitioner primarily assails the use of Pavulon in the lethal injection protocol by arguing that its use in combination with sodium Pentothal and potassium chloride creates a risk of unnecessary physical and psychological suffering. Specifically, the petitioner asserts that if an inmate receives an insufficient dose of sodium Pentothal, he or she will not be sedated while undergoing the paralysis caused by Pavulon and the cardiac failure caused by potassium chloride.

The petitioner's arguments, however, are not supported by the evidence in the record. Indeed, although it was undisputed that the injection of Pavulon and potassium chloride would alone cause extreme pain and suffering, all of the medical experts who testified before the Chancellor agreed that a dosage of five grams of sodium Pentothal as required under Tennessee's lethal injection protocol causes nearly immediate unconsciousness and eventually death. Dr. Levy testified that such a dose would cause an inmate to be unconscious in about five seconds and that the inmate would never regain consciousness and would feel no pain prior to dying. Dr. Heath similarly testified that a lesser dosage of two grams of sodium Pentothal would cause unconsciousness in all but "very rare" cases and that a dosage of five grams would "almost certainly cause death."

The evidence regarding the lethal injection execution of Robert Coe in 2000 supported this medical testimony. Dr. Levy testified, for instance, that the cause of Coe's death was an "acute intoxication" by sodium Pentothal, Pavulon, and potassium chloride. He further stated that, based on the levels of the drugs found in Coe's body, Coe would have been unconscious within seconds of being injected with sodium Pentothal and would have died within five minutes. Coe would not have regained consciousness and would not have experienced any pain or discomfort as a result of the three drugs. There was no proof to the contrary.

The petitioner attempts to bolster his contention as to Pavulon by also asserting that the lethal injection protocol further heightens the risk of unnecessary physical and psychological suffering by, among other things, failing to adequately insert and monitor the inmate's IV catheter, requiring a "cutdown" procedure where an IV catheter cannot be inserted, and failing to ensure the proper handling, labeling, and administering of the drugs.

Again, however, the petitioner's arguments simply are not supported by the evidence in the record. There was no evidence in the record that the procedures followed under the lethal injection protocol have resulted in the problems feared by the petitioner; indeed, the undisputed evidence was that the sole lethal injection carried out in Tennessee, i.e., Robert Coe in 2000, had revealed "no significant difficulties with the process." Likewise, there was no evidence of problems occurring in the more than thirty other state or federal jurisdictions that have used the same or similar protocol on many occasions. In fact, at least one state has rejected nearly identical claims as those raised by the petitioner. Webb, 750 A.2d at 456 (refuting defendant's arguments of "possible" problems in lethal injection and emphasizing Connecticut's adequate safeguards for proper IV insertion and monitoring and the proper administration of the drugs).

In addition, we agree with the Court of Appeals' observation that we cannot judge the lethal injection protocol based solely on speculation as to problems or mistakes that *might* occur. We must instead examine the lethal injection protocol as it exists today. The Supreme Court of Connecticut has reached the same conclusion:

"The defendant's argument is premised on a series of presumptions: that the personnel will not be trained adequately; that the dosage of thiopental sodium ten times the surgical dose will not be sufficient to render the inmate unconscious; and that the agents will not be administered in the proper time and sequence. The evidence, however, supports a conclusion that reasonable steps have been taken to eliminate human error We conclude ... that the agents may be administered correctly and effectively, and that the possibility of a 'botched' execution is extremely remote under the protocol." *Webb*, 750 A.2d at 456.

Having reached these conclusions, we acknowledge and share the Chancellor's concerns that several issues raised by Dr. Heath's testimony could serve as the basis for future study. In particular, the issue of the need for Pavulon, if any, and the use of an alternative to the cutdown procedure in cases where an IV catheter cannot be inserted are appropriate for additional examination. The evidence showed that the lethal injection protocol in Tennessee was adopted based entirely on what has been done in the past without difficulty in other jurisdictions with very few, if any, modifications. Nonetheless, we recognize that what could be done to update or even improve the protocol is not the appropriate legal inquiry to be undertaken by this or any other reviewing court. Instead, we must consider only those factors we have reviewed and reach our determination based on the evidence found in the record.

Having done so, we conclude that the petitioner has failed to establish that the lethal injection protocol is cruel and unusual punishment under the United States or Tennessee constitutions.

Due Process

The petitioner next argues that the lethal injection protocol violates due process under the United States and Tennessee constitutions. He cites as reasons the manner in which the lethal injection protocol was adopted, as well as the risk of unnecessary pain and suffering that the lethal injection protocol engenders. In reply, the State argues that lethal injection was properly enacted as a means of execution by the legislature and that the protocol was properly enacted by the Department of Correction. Tenn. Code Ann. § 40-23-114(d) (2003). The State also argues that the petitioner failed to show any risk of unnecessary pain and suffering in violation of his due process rights.

We begin our analysis with a review of the constitutional provisions regarding due process. The United States Constitution prohibits any state from depriving "any person of life, liberty, or property, without due process of law." U.S. Const. amend. XIV, § 1. Article I, section 8 of the Tennessee Constitution states, "no man shall be taken or imprisoned, or disseized of his freehold, liberties or privileges, or outlawed, or exiled, or in any manner destroyed or deprived of his life, liberty or property, but by the judgment of his peers or the law of the land."

This Court has stated that "due process of law is the primary and indispensable foundation of individual freedom," and the "basic and essential term in the social compact which defines the rights of the individual and delimits the powers which the state may exercise." *State ex rel. Anglin v. Mitchell*, 596 S.W.2d 779, 785 (Tenn. 1980) (quoting *In re Gault*, 387 U.S. 1, 20 (1967))."As a result of its very important role in our society, due process is not a static legal principle, but, in a free society, it is an advancing standard consisting of those basic rights which are deemed reasonable and right." *City of White House v. Whitley*, 979 S.W.2d 262, 266 (Tenn. 1998).

Procedural due process requires "fundamentally fair" procedures to be employed whenever a governmental entity acts to deprive a person of a right to or interest in life, liberty or property. *See Fuentes v. Shevin*, 407 U.S. 67, 80 (1972). Substantive due process, on the other hand, is implicated where an executive agency of government acts in a manner that is (1) arbitrary, irrational or improperly motivated or (2)

so egregious that it shocks the conscience. *County of Sacramento v. Lewis*, 523 U.S. 833, 840 (1998); *see also Parks Properties v. Maury County*, 70 S.W.3d 735, 744 (Tenn. Ct. App. 2001).

In this case, the petitioner has failed to cite authority or otherwise make a persuasive argument that the adoption of the lethal injection protocol violated procedural due process. Moreover, the evidence before the Chancellor showed that the method of lethal injection was created by the legislature and that the implementation of lethal injection was left to the Department of Correction. Tenn. Code Ann. § 40-23-114(c) (2003). Following the legislation, the Department of Correction created a committee, which studied the matter before adopting a lethal injection protocol substantially similar to that used by nearly every other state and the federal government. For the reasons discussed hereafter in this opinion, the Department was not subject to the notice and Uniform Administrative approval provisions of the Procedures Act or any similar statutory requirements. As a result, we conclude that the petitioner has failed to establish any deprivation of procedural due process in the creation of the Tennessee lethal injection protocol.

Similarly, the petitioner has failed to establish a violation of substantive due process. First, as explained above, there is nothing arbitrary, irrational, improper or egregious in the Department of Correction following the legislative mandate to implement lethal injection as a method of punishment. Second, there is nothing arbitrary, irrational, improper or egregious in the manner in which the Department implemented a lethal injection protocol, i.e., by studying the lethal injection protocols of other states and the federal government and by using those protocols as models for the creation of Tennessee's protocol. Finally, as fully explained in our analysis of the cruel and unusual punishment issue, there is no evidence that the Tennessee lethal injection protocol creates an unreasonable risk of unnecessary pain and suffering. Accordingly, we conclude that the petitioner has failed to demonstrate a violation of either procedural or substantive due process under the United States or Tennessee constitutions.

Open Courts

The petitioner argues that the lethal injection protocol, and specifically the use of Pavulon, violates his right to have access to the courts and to protect his rights under the First, Eighth, and Fourteenth Amendments to the United States Constitution and Article I, sections 8, 13, 16, 17, and 19 of the Tennessee Constitution. The State maintains that the petitioner failed to demonstrate that the lethal injection protocol violates his right to access the courts.

The petitioner's principal argument is that the use of Pavulon creates a "chemical veil" through which his attorney or other witnesses to the execution cannot discern his pain and suffering and thus, cannot seek judicial relief to protect him from cruel and unusual punishment. As with the cruel and unusual punishment issue, the petitioner again argues that the pain and suffering may result from an insufficient or improperly administered dose of sodium Pentothal, an insufficient IV catheter connection, a mislabeling or misuse of drugs, or myriad other possibilities.

The petitioner's argument is flawed, however, in that he has failed to show evidence that a scenario involving unnecessary pain and suffering is anything other than speculation. The undisputed evidence instead showed that an injection of five grams of sodium Pentothal under Tennessee's lethal injection protocol causes nearly immediate unconsciousness and is, in fact, fatal. The undisputed evidence further showed that an inmate injected with five grams of sodium Pentothal would remain unconscious and feel no pain through the lethal injection process. Finally, the evidence showed that an overwhelming majority of jurisdictions use a lethal injection protocol with the same combination of drugs used in Tennessee. There was no evidence that the other jurisdictions have had any of the potential problems cited by the petitioner. In sum, the petitioner has failed to establish a violation of his right to access to the courts.

REMAINING ISSUES

The remaining issues on appeal were dismissed by the trial court for the failure to state a claim upon which relief can be granted. Tenn. R. Civ. P. 12.02(6). A Rule 12.02(6) motion tests the legal sufficiency of the complaint and not the strength of the evidence. *Riggs v. Burson*, 941 S.W.2d 44, 47 (Tenn. 1997). Courts must accept the allegations of fact as true and deny the motion unless it appears that the plaintiff can establish no facts supporting the claim that would warrant relief. *Id.* On appeal, we must take the factual allegations contained in the complaint as true and review the lower court's legal conclusions de novo without a presumption of correctness. *Stein v. Davidson Hotel Co.*, 945 S.W.2d 714, 716 (Tenn. 1997).

Uniform Administrative Procedures Act

The petitioner argues that the procedures in the lethal injection protocol were "rules" adopted by the Department of Correction in violation of the Uniform Administrative Procedures Act ("UAPA"). Tenn. Code Ann. § 4-5-101 *et seq.* (1998 & Supp. 2004). The State responds that the Court of Appeals properly concluded that the lethal injection protocol was not subject to the requirements of the UAPA.

The UAPA requires a state agency in Tennessee to follow uniform procedures when making rules. Tenn. Code Ann. § 4-5-201 et seq. (1998 & Supp.2004). These detailed procedures govern public hearings on the content of proposed rules, the conduct of those hearings, approval of the rules by the Attorney General, filing of the rules with the Secretary of State, and publication in the administrative register. *Id.*

Under the UAPA, an "agency" refers to a "state board, commission, committee, department, officer, or any such unit

of state government authorized or required by any statute or constitutional provision to make rules" Tenn. Code Ann. § 4-5-102(2). A "rule" is an "agency statement of general applicability that implements or prescribes a law or policy or describes the procedures or practice requirements of any agency...." Tenn. Code Ann. § 4-5-102(10). However, a "rule" does not include "[s]tatements concerning only the internal management of state government and not affecting private rights, privileges or procedures available to the public," Tenn. Code Ann. § 4-5-102(10)(A), nor does a "rule" include "statements concerning inmates of a correctional facility." Tenn. Code Ann. § 4-5-102(10)(G).

As this Court has previously indicated in an unpublished order, the lethal injection protocol is not subject to the requirements of the UAPA for several reasons. *Coe v. Sundquist*, No. M2000-00897-SC-R9-CV (Tenn. 2000). First, the lethal injection protocol is not a rule as defined by the UAPA. Tenn. Code Ann. § 4-5-102(10). The protocol instead fits squarely within two exceptions to the meaning of "rule": statements concerning only the internal management of state government and not affecting private rights privileges or procedures available to the public, Tenn. Code Ann. § 4-5-102(10)(A), and statements concerning inmates of a correctional or detention facility, Tenn. Code Ann. § 4-5-102(10)(G).

Second, we have previously held that the Department of Correction's prison disciplinary procedures were not "rules" under the UAPA. *Mandela v. Campbell*, 978 S.W.2d 531, 534 (Tenn. 1998). In *Mandela*, we observed that the "legislature has provided the TDOC considerable deference and broad discretionary powers to enable the TDOC to manage its tremendous responsibilities." *Id.* Moreover, we concluded that the "promulgation requirements of public notice, public hearing, attorney general approval, and filing with the state are simply not realistic requirements for implementing procedures that concern the intricacies and complexities of a prison environment." *Id.* (citing *L'Heureux v. State Dept. of*

Corr., 708 A.2d 549, 553 (R.I. 1998)). We believe that this reasoning is equally appropriate and consistent as applied to the lethal injection protocol.

Finally, we conclude that the petitioner's reliance on Tennessee Code Annotated section 40-23-114(c), which states that "[t]he department of correction is authorized to promulgate necessary rules and regulations to facilitate the implementation of this statute," is not persuasive. This statute does not address the definition of "rules" under the UAPA or the relevant exceptions. Moreover, virtually all other statutes in the Tennessee Code that authorize the promulgation of rules and regulations expressly refer to the UAPA. See Tenn. Code Ann. § 2-5-201 (2003); Tenn. Code Ann. § 4-14-309 (2003); Tenn. Code Ann. § 12-7-205 (1999); Tenn. Code Ann. § 39-17-1360 (2003); Tenn. Code Ann. § 48-101-503 (2002); Tenn. Code Ann. § 56-6-508 (2000); Tenn. Code Ann. § 56-12-220 (2000); and Tenn. Code Ann. § 67-4-1707 (2003), among others. In short, the absence of an express reference to the UAPA in section 40-23-114(c) is entirely consistent with our conclusion that the UAPA is inapplicable.

Accordingly, we conclude that the procedures in the lethal injection protocol were not "rules" adopted by the Department of Correction in violation of the UAPA and that the petitioner is not entitled to relief on this ground.

Nonlivestock Animal Humane Death Act

The petitioner next argues that the lethal injection protocol violates the Nonlivestock Animal Humane Death Act, which prohibits the use of "a neuromuscular blocking agent," such as Pavulon, in the euthanizing of nonlivestock animals. The State maintains that the Chancellor properly found that the petitioner failed to state a claim upon which relief could be granted and that the Court of Appeals properly affirmed the Chancellor's ruling. *See* Tenn. R. Civ. P. 12.02(6).

In 2001, the Tennessee legislature enacted the Nonlivestock Humane Death Act to address the issue of

euthanizing nonlivestock animals. Tenn. Code Ann. § 44-17-301 et seq (2000 & Supp. 2004). The Act applies to "public and private agencies ... operated for the collection, care and/or euthanasia of stray, neglected, abandoned or unwanted nonlivestock animals." Tenn. Code Ann. § 44-17-302. It prohibits the use of a neuromuscular blocking agent in the euthanasia of a nonlivestock animal. Tenn. Code Ann. § 44-17-303(c). A "nonlivestock animal" is "a pet normally maintained in or near the household or households of its owner or owners, other domesticated animal, previously captured wildlife, an exotic animal, or any other pet...." Tenn. Code Ann. § 39-14-201(3) (2003).

In our view, the lethal injection protocol does not violate this Act for numerous reasons. The plain language of the Act is applicable only to certain public and private agencies set out in section 44-17-302, which group does not include the Department of Correction. The plain language in the statutory definition of a nonlivestock animal as provided in section 39-14-201(3) does not include human beings. Likewise, there is no language in the Act or elsewhere that plainly states or otherwise suggests its applicability to inmates in the Department of Correction. Finally, there is no language in the lethal injection statute or elsewhere that would indicate it is to be construed or interpreted in conjunction with the Nonlivestock Animal Humane Death Act. Tenn.Code Ann. § 40-23-114.

We are constrained against adopting an interpretation of any statute that would lead to absurd results. *McClellan v. Bd. of Regents of the State Univ.*, 921 S.W.2d 684, 689 (Tenn. 1996). The petitioner's interpretation would necessarily result in a conclusion that lethal injections of death row inmates may be carried out only by veterinarians or other technicians described in this Act. We decline to adopt such an interpretation of these statutory provisions.

In short, the petitioner is not entitled to relief on this ground.

Practice of Medicine and Provision of Healthcare Services

The petitioner next argues that the lethal injection protocol is invalid because it requires medical services to be provided by persons other than licensed physicians and healthcare providers. The State responds that the lethal injection provisions created by statute do not contemplate or require the practice of medicine or the involvement of licensed healthcare providers.

We agree with the Chancellor and the Court of Appeals that the petitioner is not entitled to relief on this issue. The Department of Correction was given the statutory mandate for implementing lethal injection as a means of execution. Tenn. Code Ann. § 40-23-114. The plain language of the statute does not require the involvement of licensed physicians or healthcare workers, nor does it require the practice of medicine. As the Court of Appeals aptly observed, "[e]xtending the licensing requirements to executions by lethal injection would have the practical effect of frustrating the Tennessee General Assembly's considered decision to adopt execution by lethal injection as the primary method for carrying out capital punishment in Tennessee." Although the experience, training, and qualifications of persons involved in the lethal injection process are relevant to cruel and unusual punishment and due process issues, the lethal injection protocol falls outside of licensing statutes applicable to physicians and healthcare providers.

Accordingly, the petitioner is not entitled to relief on this ground.

Drug Control Act and Pharmacy Practice Act

The petitioner also argues that the lethal injection protocol is invalid because it requires the Warden, Ricky Bell, to obtain, mix, and administer a controlled substance in violation of the Drug Control Act of 1989 and the Pharmacy Practice Act of 1996. The State responds that the legislature properly enacted lethal injection as a means of execution and that the Acts relied upon by the petitioner are not applicable to executions by lethal injection.

The Drug Control Act of 1989 indicates that sodium Pentothal is a schedule II controlled substance. Tenn. Code Ann. § 39-17-408(e) (2003). Sodium Pentothal has a high potential for abuse, which can lead to severe dependence. Tenn. Code Ann. § 39-17-407(1). As a result, sodium Pentothal may only be dispensed by written prescription or by a practitioner directly to the user of the controlled substance. Tenn. Code Ann. § 39-17-402(7). The Pharmacy Practice Act requires that persons who prescribe or dispense sodium Pentothal or other controlled substances comply with annual registration requirements. Tenn. Code Ann. § 53-11-302(a) (1999).

We begin by emphasizing the broad statutory authority given to the Department of Correction to implement lethal injection as the primary means of execution. Tenn. Code Ann. § 40-23-114. Nothing in these provisions is subject to the provisions of the Drug Control Act or the Pharmacy Control Act. Indeed, reading any conditions or restrictions into the lethal injection provisions would risk frustrating the Tennessee General Assembly's considered decision to adopt execution by lethal injection as the primary method of execution in Tennessee.

In addition, the Drug Control Act and the Pharmacy Practice Act were designed to prevent the illegal sale or distribution of controlled substances and to provide a system for drug abuse control. These purposes would not be served or advanced by a strained interpretation making them applicable to the lethal injection statutes or to the lethal injection protocol.

As a result, the petitioner is not entitled to relief on this ground.

CONCLUSION

After our review of the record and applicable authority, we conclude that the lethal injection protocol in Tennessee, which includes intravenous injections of sodium Pentothal, pancuronium bromide, and potassium chloride, (1) does not violate the Eighth Amendment to the United States Constitution or article I, section 16 of the Tennessee Constitution, (2) does not violate due process provisions under the United States or Tennessee Constitutions, (3) does not deny access to the courts in violation of the United States or Tennessee Constitutions, (4) does not violate the Uniform Administrative Procedures Act, (5) does not violate the Nonlivestock Animal Humane Death Act, (6) does not violate provisions governing the practice of medicine and provision of healthcare services, and (7) does not violate the Drug Control Act or Pharmacy Practice Act. Accordingly, we affirm the judgment of the Court of Appeals. It appearing that the petitioner is indigent, costs of this appeal are taxed to the State.

COURT OF APPEALS OF TENNESSEE, AT NASHVILLE

ABU-ALI ABDUR'RAHMAN v. Phil Bredesen, et al.

No. M2003-01767-COA-R3-CV

February 23, 2004, Assigned on Briefs October 6, 2004, Filed

Before WILLIAM C. KOCH, JR., P.J., M.S., WILLIAM B. CAIN and FRANK G. CLEMENT, JR., JJ.

OPINION

WILLIAM C. KOCH, JR., P.J., M.S.

This appeal involves a challenge to the Tennessee Department of Correction's three-drug lethal injection protocol. A prisoner awaiting execution filed suit in the Chancery Court for Davidson County asserting that the procedure used to adopt the protocol was legally flawed, that the protocol violated various licensing and regulatory requirements, and that the protocol itself violates the prohibitions against cruel and unusual punishments in Tenn. Const. art. I, § 16 and U.S. Const. amend. VIII. The trial court granted the State's motion to dismiss the challenges to the adoption of the protocol and the protocol's compliance with regulatory requirements. Following a hearing, the trial court filed a memorandum and order concluding that the Department's lethal injection protocol does not result in cruel and unusual punishment. The prisoner has appealed. We affirm the trial court's conclusion that the adoption of the

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protocol was consistent with state law and that the protocol's method of lethal injection does not violate either Tenn. Const. art. I, § 16 or U.S. Const. amend. VIII.

I.

Abu-Ali Abdur'Rahman (formerly James Lee Jones) has a long history of violent, anti-social behavior. In February 1986, while he was on parole, Mr. Abdur'Rahman and Devalle Miller entered the duplex of Patrick Daniels and Norma Norman under the pretext of making a drug purchase. They bound their victims with duct tape about their hands, feet, eyes, and mouths. After taking Mr. Daniels's bank card, \$ 300 of Ms. Norman's money, and some marijuana found in a sofa, Mr. Abdur'Rahman told Mr. Daniels that he was going to teach him a lesson and then stabbed him six times in the chest with a butcher knife while Mr. Daniels pleaded for his life. Mr. Abdur'Rahman also stabbed Ms. Norman several times in the back, and then he and Mr. Miller fled, leaving the knife in Ms. Norman's back. Mr. Daniels died as a result of his wounds, but Ms. Norman survived.

In July 1986, a Davidson County grand jury indicted Mr. Abdur'Rahman for first degree murder, assault with intent to commit first degree murder, and armed robbery.¹ In 1987, a jury found Mr. Abdur'Rahman guilty of all three offenses and sentenced him to death for the murder conviction and consecutive life sentences for the two remaining convictions. The Tennessee Supreme Court affirmed the convictions,² and United States Supreme Court denied the Mr. Abdur'Rahman's petition for writ of certiorari.³ The Criminal Court for Davidson County thereafter denied Mr. Abdur'Rahman's petition for post-conviction relief. The

¹ The grand jury issued a superceding indictment on March 27, 1987.

² State v. Jones, 789 S.W.2d 545 (Tenn. 1990).

³ Jones v. Tennessee, 498 U.S. 908 (1990).

Tennessee Court of Criminal Appeals affirmed the decision,⁴ n4 and both the Tennessee Supreme Court and the United States Supreme Court declined to review the case.⁵

The Criminal Court for Davidson County set Mr. Abdur'Rahman's execution date for June 10, 1996. On April 23, 1996, Mr. Abdur'Rahman triggered what has proved to be protracted proceedings in federal court by filing a pro se petition for writ of habeas corpus in the United States District Court for the Middle District of Tennessee.⁶ In April 1998, the District Court concluded that Mr. Abdur'Rahman had received ineffective assistance of counsel at the sentencing phase of his 1987 trial and vacated Mr. Abdur'Rahman's death sentence.⁷ A divided panel of the United States Court of Appeals for the Sixth Circuit reversed this decision two years later,⁸ and the United States Supreme Court declined to review the case.⁹

Immediately after the United States Supreme Court declined to consider his case, Mr. Abdur'Rahman returned to the Sixth Circuit and the District Court seeking relief on the ground of prosecutorial misconduct. Based on an intervening

⁴ Jones v. State, 1995 Tenn. Crim. App. LEXIS 140, No. 01C01-9402-CR-00079, 1995 WL 75427 (Tenn. Crim. App. Feb. 23, 1995).

⁵ Jones v. State, No. 01C01-9402-CR-00079, 1995 WL 75427 (Tenn. Aug. 28, 1995); Jones v. Tennessee, 516 U.S. 1122 (1996).

⁶ The District Court later appointed counsel for Mr. Abdur'Rahman.

⁷ Abdur'Rahman v. Bell, 999 F. Supp. 1073 (M.D. Tenn. 1998).

⁸ Abdur'Rahman v. Bell, 226 F.3d 696 (6th Cir. 2000). The court also denied Mr. Abdur'Rahman's petition for rehearing and suggestion for rehearing en banc but stayed its mandate to permit him to file a petition for writ of certiorari in the United States Supreme Court.

⁹ *Abdur'Rahman* v. *Bell*, 534 U.S. 970, reh'g denied, 534 U.S. 1063 (2001).

United States Supreme Court decision¹⁰ and the Tennessee Supreme Court's adoption of Tenn. S. Ct. R. 39, he requested the Sixth Circuit to vacate its judgment and remand the case to the District Court. He also filed a Fed. R. Civ. P. 60(b) motion in the District Court seeking relief from the judgment. In late 2001, the District Court declined to consider the motion and transferred it to the Sixth Circuit.¹¹

On January 15, 2002, the Tennessee Supreme Court set April 10, 2002 as the date for Mr. Abdur'Rahman's execution.¹² On March 26, 2002, Mr. Abdur'Rahman was presented with the statutorily mandated choice between methods of execution and declined to make a choice. By operation of law, lethal injection became the method for carrying out Mr. Abdur'Rahman's execution.¹³ On April 3, 2002, Mr. Abdur'Rahman requested the Commissioner of Correction to issue a declaratory order pursuant to Tenn. Code Ann. § 4-5-223 (1998) regarding the "constitutionality, legality and applicability" of the Department of Correction's lethal injection protocol.¹⁴

¹² The execution date was later reset for June 18, 2004.

¹³ Tenn. Code Ann. § 40-23-114(a), (b) (2003).

¹⁴ In addition to this administrative proceeding, Mr. Abdur'Rahman initiated a judicial challenge to the lethal injection protocol. On April 4, 2002, he filed a petition in the Circuit Court for Davidson County seeking to reopen his post-conviction case to raise, among other issues, the constitutionality of lethal injection. *Abdur'Rahman* v. *State*, No. 87-W-417. On April 25, 2002, the circuit court dismissed the petition with regard to all issues except the constitutionality of lethal injection. On June 18, 2002, after the Tennessee Court of Criminal Appeals declined to consider Mr.

¹⁰ O'Sullivan v. Boerckel, 526 U.S. 838 (1999).

¹¹ Abdur'Rahman v. Bell, No. 3:96-0380, 2001 WL 1782874 (M.D. Tenn. Nov. 27, 2001). The District Court also denied Mr. Abdur'Rahman's application for a certificate of appealability. *Abdur'Rahman* v. Bell, No. 3:96-0380, 2001 WL 1782875 (M.D. Tenn. Dec. 4, 2001).

Thereafter, the Sixth Circuit issued two summary orders declining to grant the requested relief and denying all of Mr. Abdur'Rahman's pending motions because his Fed. R. Civ. P. 60(b) motion amounted to a second or successive petition for writ of habeas corpus. Mr. Abdur'Rahman filed another petition for writ of certiorari in the United States Supreme Court. On April 8, 2002, the Court stayed Mr. Abdur'Rahman's execution,¹⁵ and on April 22, 2002, granted certiorari to consider two issues regarding the consideration of federal habeas corpus petitions.¹⁶

On May 28, 2002, the Commissioner of Correction denied Mr. Abdur'Rahman's request for a declaratory order regarding the lethal injection protocol. On July 26, 2002, Mr.

¹⁵ *Abdur'Rahman* v. *Bell*, 535 U.S. 981 (2002).

¹⁶ Abdur'Rahman v. Bell, 535 U.S. 1016 (2002).

Abdur'Rahman's application for permission to appeal because the circuit court had not disposed of all the issues raised in his petition, the circuit court entered an order denying Mr. Abdur'Rahman's petition in its entirety. The Tennessee Court of Criminal Appeals affirmed the trial court in all respects. With regard to the constitutional challenge to the lethal injection protocol, the court reasoned that "the post-conviction statute does not authorize reopening the Defendant's petition on this ground." Abdur'Rahman v. State, No. M2002-01561-CCA-R28-PD (Tenn. Crim App. Order Sept. 18, 2002). On December 12, 2002, the circuit court entered an order dismissing Mr. Abdur'Rahman's constitutional challenge to the lethal injection protocol and recognizing that his Tenn. Code Ann. § 4-5-223 petition for a declaratory order would provide a vehicle for judicial review of the constitutional issue. The Tennessee Supreme Court declined to review the Court of Criminal Appeals' order. Abdur'Rahman v. State, 2003 Tenn. LEXIS 59, No. M2002-01561-SC-R11-PD (Orders Jan. 27 & Feb. 19, 2003). The United States Supreme Court later dismissed Mr. Abdur'Rahman's certiorari petition pursuant to Sup. Ct. R. 46.2. Abdur'Rahman v. Bell, 538 U.S. 973 (2003).
Abdur'Rahman filed a Tenn. Code Ann. § 4-5-225 (1998) petition in the Chancery Court for Davidson County challenging the Tennessee Department of Correction's lethal injection protocol. He asserted that the procedure used to adopt the protocol violated the Uniform Administrative Procedures Act and the open meetings law.¹⁷ He also asserted that the protocol involved the unlawful practice of medicine and that it was contrary to the Nonlivestock Animal Human Death Act.¹⁸ Finally, he asserted that the protocol violated public policy and the prohibitions against cruel and unusual punishments in Tenn. Const. art. I, § 16 and U.S. Const. amend. VIII. The State filed an answer denying Mr. Abdur'Rahman's constitutional claims and moved to dismiss his remaining claims on the ground that they failed to state a claim upon which relief could be granted.

There was a hiatus in the state proceeding while the parties turned their attention to the proceedings in the United States Supreme Court. The Court heard oral arguments on November 6, 2002. However, on December 10, 2002, the Court filed a per curiam order dismissing the writ of certiorari as improvidently granted.¹⁹ After the case was returned to the Sixth Circuit, a majority of the court decided to rehear the case en banc. Accordingly, the court vacated its earlier judgment and granted Mr. Abdur'Rahman another stay of execution pending its consideration of the case. The case remains pending in the Sixth Circuit.

On March 28, 2003, Mr. Abdur'Rahman filed what proved to be an unsuccessful petition for writ of habeas

¹⁷ Mr. Abdur'Rahman later voluntarily dismissed his open meetings law claim.

¹⁸ Tenn. Code Ann. § 44-17-301 to -303 (Supp. 2003).

¹⁹ *Abdur'Rahman* v. *Bell*, 537 U.S. 88 (2002), pet. reh'g denied, 537 U.S. 1227 (2003).

corpus in the Circuit Court for Davidson County.²⁰ On May 6, 2003, the chancery court granted the State's motion to dismiss all the counts of Mr. Abdur'Rahman's Tenn. Code Ann. § 4-5-225 petition except for his constitutional claims. Following a bench trial on May 29, 2003, the chancery court filed a memorandum and order on June 2, 2003 concluding that the lethal injection protocol did not violate Article I, § 16 of the Tennessee Constitution and the Eighth Amendment to the United States Constitution. Mr. Abdur'Rahman appeals both from the order granting the State's motion to dismiss and from the memorandum and order upholding the constitutionality of the lethal injection protocol.

THE DEPARTMENT OF CORRECTION'S LETHAL INJECTION PROTOCOL

The Tennessee General Assembly authorized executions by lethal injection beginning in May 1998.²¹ Unlike other state legislatures that provided specific directions regarding the lethal injection procedure, the Tennessee General Assembly left it entirely to the Department of Correction "to promulgate necessary rules and regulations to facilitate the

II.

²⁰ The circuit court dismissed the petition on March 31, 2003. The Tennessee Court of Criminal Appeals affirmed the dismissal in accordance with Tenn. Crim. App. R. 20. *State* v. *Abdur'Rahman*, No. M2003-00968-CCA-R3- CO (Tenn. Crim. App. Order June 6, 2003). The Tennessee Supreme Court declined to review the case on October 6, 2003, and the United States Supreme Court likewise denied Mr. Abdur'Rahman's certiorari petition. *Abdur'Rahman* v. *Tennessee*, 158 L. Ed. 2d 622, <u>U.S.</u>, 124 S. Ct. 2066 (2004).

²¹ Act of Apr. 29, 1998, ch. 982, 1998 Tenn. Pub. Acts 757 (codified as amended at Tenn. Code Ann. § 40-23- 114 (2003)). The Tennessee General Assembly amended this act two years later, Act of Mar. 29, 2000, ch. 614, 2000 Tenn. Pub. Acts 1854, but these amendments have no direct bearing on the issues raised in this appeal.

implementation" of execution by lethal injection. Tenn. Code Ann. § 40-23-114(c). In June 1998, the Commissioner of Correction assembled a Lethal Injection Project Team. The team consisted of six employees of the Department, including the warden of the facility in which executions are carried out. None of these persons had medical training. The team obtained information from other states that had authorized and carried out executions by lethal injection and conducted on-site visits in Texas and Indiana.

The team identified the drugs most commonly used by other states to carry out executions by lethal injections. In July 1998, the team sought recommendations from the Department's Director of Health Services regarding the combination of drugs that should be used in Tennessee. The director responded that Sodium Pentothal,²² pancuronium bromide ("Pavulon"),²³ and potassium chloride²⁴ "are apparently the drugs of choice for lethal injections and should be adequate for use in Tennessee as well."²⁵ He also advised

²² Sodium Pentothal, also known as sodium thiopental, is an ultrashort-acting barbituate. It is a nonspecific central nervous system depressant that is customarily used to induce general anesthesia when administered intravenously. It works quickly, but its effects are relatively short-acting. A clinical dose will induce general anesthesia for around 10 to 30 minutes. In addition to its effects on the central nervous system, it causes cadiovascular and respiratory depression.

²³ Pavulon is a nondepolarizing, neuromuscular blocking agent that produces paralysis. It does not have sedative or analgesic effects. A lethal dose of Pavulon paralyzes the diaphragm and lungs causing breathing to cease.

²⁴ Potassium chloride is a salt that in high doses interrupts the electrical signaling essential to normal heart function. A high dose of potassium chloride administered intravenously causes cardiac arrest and rapid death.

²⁵ The history of how these three drugs became the drugs of choice is recounted in: Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Uses of*

that all these drugs, as well as the supplies and other fluids, were available through the Department's central pharmacy. Later, after one of the Department's physicians reviewed the suggested drugs with an anesthesiologist, the director reported to the team that the physician "confirms that the drugs and dosages listed are correct for a lethal injection. He [the physician] advised that the Sodium Pentothal should be administered first, then the Pavulon, and then the potassium chloride. The lines should be flushed with saline before each new drug is injected."

Based on its research, the team decided to pattern Tennessee's three-drug protocol after Texas's protocol because Texas had the most experience with carrying out executions by lethal injection. The team's protocol adopted the Director of Health Services' recommendations regarding the three drugs and the order of their administration but increased the dosages of the drugs over the dosages that the Department's physician and the consulting anesthesiologist had already determined would be fatal. The team completed most of its work by December 1998 and updated the Department's "Execution Manual" to include the lethal injection protocol. After the execution of Robert Glen Coe by lethal injection on April 19, 2000, the Department conducted another review of these procedures based on its experience with Coe's execution.

The three-drug lethal injection protocol in the Department's Execution Manual²⁶ calls for the intravenous injection of three drugs in the following order and dosages using seven 60 cc syringes. The first syringe contains five

Electrocution and Lethal Injection and What it Says About Us, 63 OHIO ST. L.J. 63, 90-100 (2002) ("Denno").

²⁶ The version of the manual under scrutiny in this case is dated July 25, 2002.

grams of Sodium Pentothal mixed in solution with 50 cc of sterile water.²⁷ The second syringe contains 50 cc of saline solution.²⁸ The third and fourth syringes each contain 50 cc of Pavulon at 1mg/ml.²⁹ The fifth syringe contains 50 cc of saline solution.³⁰ The sixth and seventh syringes each contain 50 cc of potassium chloride.³¹

Shortly before the execution, the prisoner is secured to a gurney, and the gurney is rolled into the death chamber. Once in the death chamber, arm extensions are attached to the gurney, and the prisoner's arms are secured to the arm extensions. An IV team consisting of two certified paramedics and one correctional officer then inserts a catheter into the veins of both of the prisoner's inner arms just above the elbow.³² These catheters are connected by surgical tubing to a bag of saline solution hung from a stand mounted on the ceiling of an adjacent room where the executioner is located. The executioner is able to view the prisoner through a window and with a closed-circuit television camera focused on the area where the catheters have been inserted.

At the warden's signal, the executioner inserts the first syringe containing the Sodium Pentothal into a "Y" connector in the surgical tubing and "pushes" the entire contents of the

²⁷ To insure its potency, the Sodium Pentothal is mixed shortly before the execution and is placed in a yellow syringe marked with the number "1."

²⁸ This syringe is colored black and is marked with the number "2."

²⁹ These two syringes are colored blue and are marked with the numbers "3" and "4" respectively.

 $^{^{30}}$ This syringe, like syringe number 2, is colored black and is marked with the number "5."

³¹ These two syringes are colored red and are marked with the numbers "6" and "7" respectively.

³² One of the catheters is used as a backup in case something goes wrong with the first catheter.

syringe into the saline solution flowing into the prisoner's vein. Once the first syringe is emptied, the executioner proceeds with the remaining syringes until all seven syringes have been emptied in sequence. Following the injection of the contents of the final syringe, the blinds on the window between the death chamber and the room where the witnesses are seated are closed, and the state medical examiner then examines the prisoner to determine whether he or she is dead. If the prisoner is dead, the physician pronounces him or her dead.³³ The body is then removed from the death chamber and transported to the office of the state medical examiner where an autopsy is performed.

THE APPLICATION OF THE RULE-MAKING PROVISIONS OF THE UNIFORM ADMINISTRATIVE PROCEDURES ACT TO THE ADOPTION OF THE LETHAL INJECTION PROTOCOL

Mr. Abdur'Rahman first takes issue with the process that the Department used to prepare and adopt its lethal injection protocol. He insists that the Department should have promulgated this protocol using the rule-making procedures found in the Uniform Administrative Procedures Act. He also criticizes the Department for developing the lethal injection protocol "entirely outside the public's eye." Mr. Abdur'Rahman's arguments lack legal foundation.

In 1998, the Tennessee Supreme Court determined that the Department of Correction was not required to follow the Uniform Administrative Procedures Act's rule-making procedures to adopt its Uniform Disciplinary Policy. Noting that Tenn. Code Ann. §4-6-102 (1998) vested broad management power in the Department, the court held (1) that

III.

³³ In Robert Glen Coe's execution by lethal injection on April 19, 2000, the injection of the drugs began at 1:32 a.m. Mr. Coe was examined by a physician at 1:36 a.m. and was pronounced dead at 1:37 a.m.

formal rule-making proceedings were ill-suited to the management of prisons and (2) that the Uniform Disciplinary Policy did not fit within the Uniform Administrative Procedures Act's definition of "rule" because it concerned the internal management of state government and did not affect the private rights, privileges, or procedures available to the public. *Mandela v. Campbell*, 978 S.W.2d 531, 533-35 (Tenn. 1998).

The *Mandela v. Campbell* decision dealt only with the Department's Uniform Disciplinary Policy. However, on the eve of the execution of Robert Glen Coe, the Tennessee Supreme Court extended the reach of its *Mandela* v. *Campbell* decision to the Department of Correction's lethal injection protocol. Despite the specific language in Tenn. Code Ann. § 40-23-114(c) directing the Department "to promulgate necessary rules and regulations" to facilitate executions by lethal injection, the court held that the Department's lethal injection protocol is not a "rule under the UAPA" because it "fits squarely" within the exceptions to the Uniform Administrative Procedures Act in Tenn. Code Ann. § 4-5-102(10)(A), (D) (1998). *Coe v. Sundquist*, No. M2000-00897-SC-R9- CV (Tenn. Order Apr. 19, 2000).

Once the Tennessee Supreme Court has addressed an issue, its decision regarding that issue is binding on the lower courts. *State v. Irick, 906* S.W.2d 440, 443 (Tenn. 1995); *Payne v. Johnson,* 2 Tenn. Cas. (Shannon) 542, 543 (1877). Thus, this court is bound to adhere to the decisions of the Tennessee Supreme Court. *Bing v. Baptist Mem'l Hosp.,* 937 S.W.2d 922, 925 (Tenn. Ct. App. 1996); *Estate of Schultz v. Munford, Inc.,* 650 S.W.2d 37, 39 (Tenn. Ct. App. 1982). The court has even admonished us that we are not free to disregard its obiter dictum when the court is speaking directly on the matter before it and it is seeking to give guidance to the bench and bar. *Holder v. Tennessee Judicial Selection Comm'n,* 937 S.W.2d 877, 881-82 (Tenn. 1996).

The Tennessee Supreme Court's conclusion that the Department's lethal injection protocol need not be promulgated as a rule in accordance with the Uniform Administrative Procedures Act is contained in an unpublished order. While some may question the precedential value of an unpublished order, even an unpublished Tennessee Supreme Court order, we do not. Applying the twin criteria in Holder v. Tennessee Selection Comm'n, we conclude that the Coe v. Sundquist order directly addressed the issue of the application of the Uniform Administrative Procedures Act's rule- making requirements to the Department's lethal injection protocol and that the court intended its decision to give guidance to the bench and bar. Accordingly, based on the Court's order in Coe v. Sundquist, we concur with the trial court's conclusion that the Department was not required to promulgate its lethal injection protocol as a rule under the Uniform Administrative Procedures Act.

The conclusion that the protocol need not be promulgated as a rule also disposes of Mr. Abdur'Rahman's complaint that the Department developed the protocol outside of the public's eye. Because the Uniform Administrative Procedures Act is inapplicable, no notice and public comment is required. To the extent that this argument is an attempt to resurrect Mr. Abdur'Rahman's claim that the Department violated Tenn. Code Ann. § 8-44-102 (2002), we note that he voluntarily dismissed that claim in the trial court on December 2, 2002. Parties cannot advance claims or defenses on appeal that they did not pursue at trial. *Norton v. McCaskill*, 12 S.W.3d 789, 795 (Tenn. 2000); *Burton v. Warren Farmers Co-op.*, 129 S.W.3d 513, 522 (Tenn. Ct. App. 2002).

THE APPLICATION OF THE NONLIVESTOCK ANIMAL HUMANE DEATH ACT

Mr. Abdur'Rahman asserts next that the inclusion of Pavulon in the Department's three-drug lethal injection protocol violates the Nonlivestock Animal Humane Death

IV.

Act, Tenn. Code Ann. §§ 44-17-301 to -303 (Supp. 2003). He asserts that he is a "nonlivestock animal" as defined in Tenn. Code Ann. § 39-14-201(3) (2003),³⁴ and, therefore, that Pavulon cannot be included in the lethal injection protocol because Tenn. Code Ann. § 44-17-303(c) prohibits the use of "a neuromuscular blocking agent" for the purpose of euthanizing nonlivestock animals. Like the trial court, we have concluded that the Nonlivestock Animal Humane Death Act does not apply to the execution of a human being by lethal injection pursuant to Tenn. Code Ann. § 40-23-114.

A.

In 1980, the Tennessee General Assembly enacted the Dog and Cat Humane Death Act.³⁵ The purpose of the Act was to facilitate humane euthanasia of dogs and cats by permitting animal shelters and pounds to obtain and use sodium pentobarbital. In addition to sodium pentobarital, the Act expressly permitted euthanasia of dogs and cats using carbon monoxide, chloroform, nitrogen chambers, other barbiturates, and a drug referred to as T-61.³⁶ Tenn. Code Ann. § 44-17-303 (repealed).

³⁴ Tenn. Code Ann. § 39-14-201(3) defines a "non-livestock animal" as "a pet normally maintained in or near the household or households of its owner or owners, other domesticated animal, previously captured wildlife, an exotic animal, or any other pet, including but not limited to, pet rabbits, a pet chick, duck, or pot bellied pig that is not classified as 'livestock' pursuant to this part." Specifically, Mr. Abdur'Rahman insists that he is a "domesticated animal."

³⁵ Act of Feb. 4, 1980, ch. 482, 1980 Tenn. Pub. Acts 87 (formerly codified at Tenn. Code Ann. § 44-17-301 to -305 (2000)).

³⁶ T-61 is another name for Tanax, a solution with three components (embutramide, mebenzonium iodide, and tetracaine hydrochloride) used to euthanize pets and laboratory animals.

In 2001, the Tennessee General Assembly replaced the Dog and Cat Humane Death Act with the present Nonlivestock Animal Humane Death Act.³⁷ By its plain terms, the Act applies only to "public and private agencies . . . operated for the collection, care and/or euthanasia of stray, neglected, abandoned or unwanted nonlivestock animals." Tenn. Code Ann. § 44-17-302. The Act permits euthanasia using "sodium pentobarbital and such other agents as may be specifically approved by the rules of the board of veterinary medicine," Tenn. Code Ann. § 44-17-303(a), and specifically prohibits the use of several substances, including "neuromuscular blocking agents." Tenn. Code Ann. § 44-17-303(c).³⁸

The responsibility for determining what a statute means rests with the courts. *Roseman v. Roseman,* 890 S.W.2d 27, 29 (Tenn. 1994); *Realty Shop, Inc. v. R.R. Westminster Holding, Inc.,* 7 S.W.3d 581, 601 (Tenn. Ct. App. 1999). We must ascertain and then give the fullest possible effect to the General Assembly's purpose in enacting the statute as reflected in the statute's language. *Stewart v. State,* 33 S.W.3d

B.

³⁷ Act of April 5, 2001, ch. 194, 2001 Tenn. Pub. Acts 114.

³⁸ The statute does not state clearly whether the prohibition regarding neuromuscular blocking agents is limited to the use of these agents as the sole agents for euthanasia. While a 1993 report by the American Veterinary Medical Association's Panel on Euthanasia stated that combining a neuromuscular blocking agent with another approved agent such as sodium pentobarbital is not acceptable, 1993 Report of the AVMA Panel on Euthanasia, 202 229 JAVMA (Jan. 15. 1993). available at http://www.nal.usda.gov/awic/pubs/noawicpubs/avmaeuth93.htm, the same panel concluded in 2000 that the use of neuromuscular blocking agents was unacceptable only when used as the sole agent for euthanasia. 2000 Report of the AVMA Panel on Euthanasia, 218 JAVMA 669, 681, 696 (Mar. 1, 2001), available http://www.avma.org/resources/euthanasia.pdf.

785, 790-91 (Tenn. 2000); Lavin v. Jordon, 16 S.W.3d 362, 365 (Tenn. 2000). In doing so, we must avoid constructions that unduly expand or restrict the statute's application. Watt v. Lumbermens Mut. Cas. Ins. Co., 62 S.W.3d 123, 127-28 (Tenn. 2001); Patterson v. Tennessee Dep't of Labor & Workforce Dev., 60 S.W.3d 60, 64 (Tenn. 2001); Limbaugh v. Coffee Med. Ctr., 59 S.W.3d 73, 83 (Tenn. 2001). Our goal is to construe a statute in a way that avoids conflict and facilitates the harmonious operation of the law. Frazier v. East Tenn. Baptist Hosp., 55 S.W.3d 925, 928 (Tenn. 2001); LensCrafters, Inc. v. Sundquist, 33 S.W.3d 772, 777 (Tenn. 2000).

Our construction of a statute is more likely to conform with the General Assembly's purpose if we approach the statute presuming that the General Assembly chose its words purposely and deliberately, Tidwell v. Servomation-Willoughby Co., 483 S.W.2d 98, 100 (Tenn. 1972); Merrimack Mut. Fire Ins. Co. v. Batts, 59 S.W.3d 142, 151 (Tenn. Ct. App. 2001), and that the words chosen by the General Assembly convey the meaning the General Assembly intended them to convey. Limbaugh v. Coffee Med. Ctr., 59 S.W.3d at 83; BellSouth Telecomms., Inc. v. Greer, 972 S.W.2d 663, 673 (Tenn. Ct. App. 1997). Thus, we must construe statutes as we find them, Jackson v. Jackson, 186 Tenn. 337, 342, 210 S.W.2d 332, 334 (1948); Pacific Eastern Corp. v. Gulf Life Holding Co., 902 S.W.2d 946, 954 (Tenn. Ct. App. 1995), and our search for a statute's purpose must begin with the words of the statute itself. *Blankenship v*. Estate of Bain, 5 S.W.3d 647, 651 (Tenn. 1999); State ex rel. *Comm'r of Transp. v. Medicine Bird Black Bear White Eagle,* 63 S.W.3d 734, 754 (Tenn. Ct. App. 2001).

We must give a statute's words their natural and ordinary meaning unless the context in which they are used requires otherwise. *Frazier* v. *East Tenn. Baptist Hosp.*, 55 S.W.3d at 928; *Mooney v. Sneed*, 30 S.W.3d 304, 306 (Tenn. 2000); *State v. Fitz*, 19 S.W.3d 213, 216 (Tenn. 2000). Because words are known by the company they keep, *State ex rel.*

Comm'r of Transp. v. Medicine Bird Black Bear White Eagle, 63 S.W.3d at 754-55, we should construe the words in a statute in the context of the entire statute and in light of the statute's general purpose. *State v. Flemming*, 19 S.W.3d 195, 197 (Tenn. 2000); *Lyons v. Rasar*, 872 S.W.2d 895, 897 (Tenn. 1994); *Wachovia Bank of N.C. v. Johnson*, 26 S.W.3d 621, 624 (Tenn. Ct. App. 2000). When the meaning of statutory language is clear, we must interpret it as written, *Kradel v. Piper Indus., Inc.*, 60 S.W.3d 744, 749 (Tenn. 2001); *ATS Southeast, Inc. v. Carrier Corp.*, 18 S.W.3d 626, 629-30 (Tenn. 2000), rather than using the tools of construction to give the statute another meaning. *Limbaugh v. Coffee Med. Ctr.*, 59 S.W.3d at 83; *Gleaves v. Checker Cab Transit Corp.*, 15 S.W.3d 799, 803 (Tenn. 2000).

The tasks of statutory construction and applying a statute to a particular set of facts involve questions of law rather than questions of fact. *Patterson v. Tennessee Dep't of Labor and Workforce Dev.*, 60 S.W.3d at 62; *State v. McKnight*, 51 S.W.3d 559, 562 (Tenn. 2001); *Myint v. Allstate Ins. Co.*, 970 S.W.2d 920, 924 (Tenn. 1998). Accordingly, appellate courts must review a trial court's construction of a statute or application of a statute to a particular set of facts de novo without a presumption of correctness. *State v. Walls*, 62 S.W.3d 119, 121 (Tenn. 2001); *Hill v. City of Germantown*, 31 S.W.3d 234, 237 (Tenn. 2000); *Mooney v. Sneed*, 30 S.W.3d at 306.

C.

The logic of Mr. Abdur'Rahman's interpretation of the Nonlivestock Animal Humane Death Act leads to absurd results. If he is a nonlivestock animal for the purpose of the Nonlivestock Animal Humane Death Act, then his execution may only be carried out by a licensed veterinarian, a veterinarian technician, or a shelter employee who has successfully completed a euthanasia- technician certification course. Tenn. Code Ann. § 44-17-303(d). Because our task is to employ the canons of construction to make sense rather

than nonsense out of statutes,³⁹ we reject Mr. Abdur'Rahman's interpretation of the Nonlivestock Animal Humane Death Act.

Both the plain language and the legislative history of the Nonlivestock Animal Humane Death Act demonstrate that the General Assembly did not intend the Act to apply to human beings. The Act was amended in 2001 for two reasons - to respond to the death of a Chattanooga animal shelter worker who died in a gas chamber accident and to revise and modernize the former statute in light of the acceptance of sodium pentobarbital to euthanize animals. We find no indication in the Act's legislative history that the General Assembly entertained any notion that this Act would apply to human beings.

This conclusion is borne out by the Act's plain language. First, the Department of Correction is plainly not a "public ... agency ... operated for the collection, care and/or euthanasia of stray, neglected, abandoned or unwanted nonlivestock animals." Second, human beings are not "domesticated animals" and, therefore, are not nonlivestock animals as defined in Tenn. Code Ann. § 39-14-201(3). Third, execution by lethal injection is not by definition equivalent to "euthanasia" as that word is commonly applied to human beings.⁴⁰

³⁹ West Va. Univ. Hosps., Inc. v. Casey, 499 U.S. 83, 101, 111 S. Ct. 1138, 1148, 113 L. Ed. 2d 68 (1991); McClellan v. Board of Regents, 921 S.W.2d 684, 689 (Tenn. 1996); Mercy v. Olsen, 672 S.W.2d 196, 200 (Tenn. 1984).

⁴⁰ The common meaning of "euthanasia" when applied to human beings is "the intentional putting to death of a person with an incurable or painful disease intended as an act of mercy." PDR MEDICAL DICTIONARY 606 (1995); see also STEDMAN'S ILLUSTRATED MEDICAL DICTIONARY 494 (5th Unabridged Lawyers' Ed. 1982); Webster's Third New Int'l Dictionary 786 (1971).

V. THE APPLICATION OF LICENSING AND REGULATORY REQUIREMENTS

Mr. Abdur'Rahman also challenges the Department's lethal injection protocol because it envisions that persons other than licensed physicians and nurses will perform procedures that, in a clinical setting, would normally be performed only by physicians and nurses. He also argues that the protocol's procedures for obtaining, mixing, and administering the Sodium Pentothal violate the Tennessee Drug Control Act of 1989⁴¹ and the Tennessee Pharmacy Practice Act of 1996.42 These technical licensure and regulatory arguments overlook two fundamental points.43 First, carrying out an execution by lethal injection is not a therapeutic procedure associated with the healing arts. Second, the Tennessee General Assembly's grant of authority to the Department in Tenn. Code Ann. § 40-23-114(c) is broad enough to enable the department to carry out an execution by lethal injection without the use of trained medical professionals and without complying strictly with the

⁴¹ Tenn. Code Ann. §§ 39-17-401 to -451 (2003).

 $^{^{42}}$ Tenn. Code Ann. §§ 63-10-401 to -412 (1997 & Supp. 2003).

⁴³ The United States Supreme Court has also found similar regulatory arguments to be without merit. A group of prisoners sentenced to death by lethal injection in Oklahoma and Texas sought to require the FDA to commence enforcement actions to prevent the use of the drugs in violation of the Federal Food, Drug, and Cosmetic Act. In upholding the FDA's refusal to take action against the states using the drugs, the Court noted that "no colorable claim is made in this case that the agency's refusal to institute proceedings violated any constitutional rights of respondents, and we do not address the issue that would be raised in such a case." *Heckler v. Chaney*, 470 U.S. 821, 838, 105 S. Ct. 1649, 1659, 84 L. Ed. 2d 714 (1985).

regulatory constraints normally applicable to the use of drugs in a clinical setting.

A. The Use of Licensed Medical Personnel

Nothing in Tenn. Code Ann. § 40-23-114 explicitly requires the Department to use licensed physicians or nurses to perform the procedures necessarily incident to an execution by lethal injection. In addition, nothing in the legislative history of the 1998 or 2000 legislation enabling executions by lethal injection indicates that the General Assembly envisioned that medical professionals would be directly involved in the lethal injection process.⁴⁴ If anything, the General Assembly may very well have anticipated that licensed medical professionals would not be involved directly in executions by lethal injection because of their professional association's long-standing position that it is unethical for physicians, physicians' assistants, and nurses to participate in executions.⁴⁵

⁴⁴ The Tennessee General Assembly's chief reason for selecting lethal injection as Tennessee's method of execution was its concern that the federal courts might conclude that electrocution was cruel and unusual punishment. The United States Supreme Court had agreed to hear an Eighth Amendment challenge to execution by electrocution. *Bryan v. Moore*, 528 U.S. 960, 120 S. Ct. 394, 145 L. Ed. 2d 306 (1999). However, in 2000, the Court dismissed the writ as being improvidently granted after Florida changed its method of execution from electrocution to lethal injection. *Bryan v. Moore*, 528 U.S. 1133, 120 S. Ct. 1003, 145 L. Ed. 2d 927 (2000).

⁴⁵ As early as 1980, the American Medical Association's Council on Ethical and Judicial Affairs had concluded that a physician should not be a participant in a legally authorized execution. Council on Ethical and Judicial Affairs, Am. Med. Ass'n, Opn. 2.06, *available at* http://www.ama-assn.org/ama/pub/category/print/8419.html (last modified July 22, 2002). Likewise, the American Nurses Association has concluded

Extending the licensing requirements to executions by lethal injection would have the practical effect of frustrating the Tennessee General Assembly's considered decision to adopt execution by lethal injection as the primary method for carrying out capital punishment in Tennessee. Were these requirements applicable to executions by lethal injection, the Department's ability to carry out its statutory mandates would be undermined because many licensed medical professionals would decline to participate in the procedure. It was for this

that participation in capital punishment is inconsistent with the ethical traditions of nursing and the ANA Code for Nurses. See Am. Nurses Assn., Position Statements: Nurses' Participation in Capital Punishment (December 8. 2994), available at http://www.nursingworld.org/readroom/position/ethics/etcptl.htm. The American Academy of Physician Assistants has likewise determined that participating in executions violates the ethical principle of beneficence. Am. Acad. of Phys. Assistants, Guidelines for Ethical Conduct for the Physician Assistant Profession (May available http://www.aapa.org/images 2000). at /GECINSERTATION.pdf. In an October 25, 1999 letter to the Commissioner of Correction, the Tennessee Medical Association pointed out that physicians could not ethically act in any way that would "assist, supervise, or contribute to the ability of another individual to directly cause the death of the condemned" and that participation included (1) consulting with or supervising the personnel involved in the lethal injection protocol, (2) selecting injection sites, (3) starting intravenous lines, (4) inspecting, testing, or maintaining the injection devices, or (5) prescribing, preparing, administering, or supervising the injection of the drugs. Despite these ethical admonitions, one state court has declined to find that a physician who participated in an execution could be disciplined for engaging in unethical conduct because the legislature had clearly authorized physicians to participate in the process. Thorburn v. Department of Corrections, 66 Cal. App. 4th 1284, 78 Cal.Rptr.2d 584, 590 (Ct. App. 1998).

reason that the Tennessee Supreme Court noted that "no public policy is violated by allowing physicians or anyone else to participate in carrying out a lawful sentence." *Coe v. Sundquist*, No. M2000-00897-SC-R9-CV (Tenn. Order Apr. 19, 2000).

In light of the Department's broad authority in *Tenn*. Code Ann. § 40-23-114 to "facilitate the implementation" of executions by lethal injection, we have determined that the Department's lethal injection protocols are exceptions to and fall outside of licensing statutes providing that certain procedures must be performed by licensed healthcare professionals. The Department does not have a statutory obligation to use licensed medical personnel to carry out an execution by lethal injection. However, the licensing question aside, the experience and training of the persons participating in an execution by lethal injection is a relevant consideration when determining whether the protocol violates the prohibitions against cruel and unusual punishments in Article I, § 16 of the Tennessee Constitution and the Eighth Amendment to the United States Constitution.

The Application of the Tennessee Drug Control Act of 1989 and the Tennessee Pharmacy Practice Act of 1996

Both the Tennessee Drug Control Act of 1989 and the Tennessee Pharmacy Practice Act of 1996 govern the manner in which controlled substances, including Sodium Pentothal, may be dispensed in a clinical setting.⁴⁶ Because of Sodium Pentothal's high potential for abuse which can lead to severe dependence,⁴⁷ it may not be dispensed⁴⁸ without a written

В.

⁴⁶ Sodium Pentothal is a Schedule II controlled substance. Tenn. Code Ann. § 39-17-408(e) (2003).

⁴⁷ Tenn. Code Ann. § 39-17-407(1), (3) (2003).

⁴⁸ Tenn. Code Ann. § 39-17-402(7) defines "dispense" as "delivering a controlled substance to an ultimate user or research subject by or pursuant to the lawful order of a practitioner,

prescription except when a practitioner,⁴⁹ other than a pharmacy, is dispensing it directly to an ultimate user.⁵⁰ Tenn. Code Ann. § 53-11-308(a) (1999). All persons who distribute or dispense controlled substances must obtain an annual registration from the appropriate licensing board.⁵¹

Executions in Tennessee are carried out at the Riverbend Maximum Security Institution in Nashville. According to the warden of that facility, the three drugs required by the protocol are obtained through the central pharmacy at the Lois M. DeBerry Special Needs Facility in Nashville. The warden is personally responsible for obtaining the drugs from the pharmacy prior to an execution, and the drugs remain under the warden's personal control at all times until they are used.⁵²

The Sodium Pentothal is the only drug that requires preparation prior to an execution. It is delivered as a kit containing the drug in powder form and a vial of sterile water for mixing. Immediately prior to an execution, the warden

including the prescribing, administering, packaging, labeling, or compounding necessary to prepare the substance for that delivery."

⁴⁹ The definition of "practitioner" in Tenn. Code Ann. § 39-17-402(22) is broad enough to include physicians, pharmacies, or other persons "licensed, registered or otherwise permitted to . . . dispense . . . or to administer a controlled substance in the course of professional practice."

⁵⁰ Tenn. Code Ann. § 39-17-402(25) defines an "ultimate user" as "a person who lawfully possesses a controlled substance for the person's own use or for the use of a member of the person's household or for the administering to an animal owned by the person or by a member of the person's household."

⁵¹ Tenn. Code Ann. § 53-11-302(a) (1999).

⁵² The warden testified that the drugs are kept in a secure locker in Riverbend's armory complex and that he has the only keys to this locker.

reviews the expiration date of the Sodium Pentothal to assure that the drug has not expired. After determining that the drug is not out-of-date, either the warden, the executioner, or another trained person mixes 50 cc of the sterile water with the powdered drug according to the directions and then draws up the solution into the yellow syringe, which is labeled with the number "one" because it will be the first syringe used when the execution begins. This process takes place in the presence of other officials of the Department who are also familiar with the protocol.⁵³

This procedure does not adhere to the generally applicable requirements for prescribing and dispensing controlled substances. For the purposes of these Acts, Riverbend's warden is neither a practitioner nor an ultimate user, and the Sodium Pentothal is dispensed without a written prescription signed by a practitioner. However, as with the licensure requirements discussed in the preceding section, the executions by lethal injection authorized by Tenn. Code Ann. § 40-23-114 are exceptions to prescription and dispensing requirements of both the Tennessee Drug Control Act of 1989 and the Tennessee Pharmacy Practice Act of 1996.

The chief purpose of these Acts is to prevent the illegal sale and use of controlled substances.⁵⁴ There is no indication in the language or legislative history of either Act that they were intended to apply to the State when it is carrying out a lawfully imposed death sentence. In fact, executions by lethal injection were not authorized in Tennessee when either Act was passed. Therefore, the General Assembly could not have envisioned that the restrictions in the Act would govern the

⁵³ The warden testified that he personally mixed the Sodium Pentothal and drew it up into the proper syringe in preparation for the only lethal injection ever carried out in Tennessee.

⁵⁴ Like its predecessor, the Tennessee Drug Control Act of 1971, the Tennessee Drug Control Act of 1989 establishes a "comprehensive system of drug and drug abuse control." *See* Act of May 3, 1971, ch. 163, caption, 1971 Tenn. Pub. Acts 366, 366.

State's use of controlled substances in the context of executions by lethal injection.

While both the Tennessee Drug Control Act of 1989 and the Tennessee Pharmacy Practice Act of 1996 apply to the manufacture, distribution, and dispensing of controlled substances, they do not purport to control or regulate how these drugs should be used by persons who have a lawful right to use them. Unlike other states whose statutes contain instructions for carrying out an execution by lethal injection, the Tennessee General Assembly left these details entirely to the Department. Therefore, while evidence regarding the manner in which the Department obtains and prepares the Sodium Pentothal is relevant with regard to Mr. Abdur'Rahman's assertion that the Department's lethal injection protocol violates Tenn. Const. art. I, § 16 and U.S. Const. amend. VIII, the fact that the protocol does not comply with either the Tennessee Drug Control Act of 1989 and the Tennessee Pharmacy Practice Act of 1996 does not provide legal grounds for invalidating the protocol.

VI.

THE CRUEL AND UNUSUAL PUNISHMENT CLAIMS

Mr. Abdur'Rahman's principal argument on this appeal is that the Department's lethal injection protocol violates the prohibitions against cruel and unusual punishments in both Tenn. Const. art. I, § 16 and U.S. Const. amend. VIII. While he does not argue that execution by lethal injection is per se cruel and unusual, he does argue that the Department's protocol is unconstitutional for essentially two other reasons. First, he asserts that the use of both Pavulon and potassium chloride poses a serious risk of unreasonable and unnecessary physical pain and psychological suffering. Second, he asserts that the protocol, viewed in its entirely, does not contain the minimum safeguards required to ensure that mistakes and errors will not cause an inhumane death. We have determined that Mr. Abdur'Rahman has failed to prove that executions in Tennessee carried out in accordance with the Department's protocol constitute cruel and unusual punishments.

A.

Neither the Tennessee Supreme Court nor the United States Supreme Court has addressed the question of whether execution by lethal injection in general, or Tennessee's protocol for carrying out an execution by lethal injection in particular, amounts to cruel and unusual punishment.⁵⁵ Accordingly, we begin by identifying the standards used to determine whether a particular punishment violates Tenn. Const. art. I, § 16 or U.S. Const. amend. VIII.

The Constitution of Tennessee has always recognized that the death penalty, in some form, is an appropriate punishment in certain circumstances.⁵⁶ *State v. Black*, 815 S.W.2d 166, 168 (Tenn. 1991). However, like its federal and state counterparts, the Constitution of Tennessee has also placed limits on the legislature's power to punish persons who commit crimes. *State v. Black*, 815 S.W.2d at 192 (Reid, C.J., dissenting in part). These limits are found in Tenn.

⁵⁵ The Tennessee Court of Criminal Appeals has upheld the constitutionality of executions by lethal injection on two occasions without much analysis. *State v. RobinsonV*, 2003 Tenn. Crim. App. LEXIS 694, No. W2001-01299-CCA-R3-DD, 2003 WL 21946735, at *49 (Tenn. Crim. App. Aug. 13, 2003), perm. app. granted (Tenn. Jan. 26, 2004); *State v. Suttles*, 1999 Tenn. Crim. App. LEXIS 969, No. 03C01-9801-CR- 00036, 1999 WL 817205, at *14 (Tenn. Ct. App. Sept. 29, 1999), aff'd 30 S.W.3d 252 (Tenn. 2000). However, the Tennessee Supreme Court has specifically declined to address the question. *State v. Suttles*, 30 S.W.3d at 264; *State v. Morris*, 24 S.W.3d 788, 797 n.8 (Tenn. 2000).

⁵⁶ Hanging was the original method of execution in Tennessee. In 1913, electrocution replaced hanging as the sole method of execution. Act of Sept. 27, 1913, ch. 36, 1913 Tenn. Pub. Acts 515. In 2000, lethal injection replaced electrocution as the primary method of execution in Tennessee except for certain prisoners who remain eligible to opt for electrocution.

Const. art. I, § 16, which states, "excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted."

The prohibition against "cruel and unusual punishments" in the Constitution of Tennessee shares a common origin with similar prohibitions in the United States Constitution and other state constitutions, which can be traced back to Magna Carta and the Declaration of Rights of 1688.⁵⁷ As the Tennessee Supreme Court has noted, the wording of Tenn. Const. art. I, § 16 is "nearly identical" to the prohibition against cruel and unusual punishment in U.S. Const. amend VIII.⁵⁸ Van Tran v. State, 66 S.W.3d 790, 799 (Tenn. 2001).

The Tennessee Supreme Court was initially hesitant to subject the General Assembly's choice of punishment for committing criminal acts to judicial scrutiny under Tenn. Const. art. I, § 16. *State v. Lasater*, 68 Tenn. 584, 587 (1877). Finally, over one century after statehood, the court confirmed that it had not only the authority but the duty, in proper cases, to review statutory criminal penalties to determine whether they imposed cruel and unusual punishments. *Brinkley v. State*, 125 Tenn. 371, 382-83, 143 S.W. 1120, 1122 (1911). The court did not, however, define the parameters of the protection afforded by Tenn. Const. art. I, § 16 or explain the analysis to be used in determining whether a particular punishment is cruel and unusual.

For the next seventy years, few cases raising issues under Tenn. Const. art. I, § 16 were brought to the court, and those that the court did consider were disposed of summarily without discussion. In 1962, the United States Supreme Court

⁵⁷ John L. Bowers, Jr. & J. L. Boren, Jr., Note, *The Constitutional Prohibition Against Cruel and Unusual Punishment* - *Its Present Significance*, 4 VAND. L. REV. 680, 682 (1951).

⁵⁸ The Eighth Amendment provides that "excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted."

extended the application of the Eighth Amendment to the states through the Fourteenth Amendment. *Robinson* v. *California*, 370 U.S. 660, 667 (1962). This decision provided a jurisprudential bridge between the case law construing the Eighth Amendment and Article I, § 16 of the Tennessee Constitution. Accordingly, seventeen years later, the Tennessee Supreme Court held that the parameters of the Tennessee Constitution's prohibition against cruel and unusual punishments were precisely the same as the Eighth Amendment. *Cozzolino v. State*, 584 S.W.2d 765, 767 (Tenn. 1979).

This view of the scope of Tenn. Const. art. I, § 16 began to crumble as soon as the ink on the Cozzolino opinion was dry. In 1981, Chief Justice Brock conceded that he had erred by concurring in the portion of the Cozzolino opinion equating Tenn. Const. art. I, § 16 with the Eighth Amendment. State v. Dicks, 615 S.W.2d 126, 132-33 (Tenn. 1981). By 1991, every member of the Tennessee Supreme Court has eschewed Cozzolino. While recognizing that the wording of the two provisions was similar, the court asserted that this similarity did not foreclose an interpretation or application of Tenn. Const. art. I, § 16 that was more expansive than the United States Supreme Court's interpretation of the Eighth Amendment. State v. Black, 815 S.W.2d at 188, 193 (Reid, C.J., dissenting in part) (stating that "Tennessee constitutional standards are not destined to walk in lock step with the uncertain and fluctuating federal standards").

After declaring theoretical independence from the federal Eighth Amendment standards, the court adopted the New Jersey Supreme Court's three-part analysis based on the United States Supreme Court's Eighth Amendment analysis in *Gregg v. Georgia*, 428 U.S. 153, 173 (1976). *State v. Black*, 815 S.W.2d at 189 (citing *State v. Ramseur*, 106 N.J. 123, 524 A.2d 188 (1987)). This analysis established that determining whether a particular punishment was cruel and unusual required the following three inquiries:

First, does the punishment for the crime conform with contemporary standards of decency? Second, is the punishment grossly disproportionate to the offense? Third, does the punishment go beyond what is necessary to accomplish any legitimate penological objective?

State v. Ramseur, 524 A.2d at 210.⁵⁹ One year later, the court again looked to the United States Supreme Court and borrowed the analytical principles that the Court had fashioned to review proportionality claims. *State v. Harris*, 844 S.W.2d 601, 603 (Tenn. 1992).⁶⁰

Most recently, the Tennessee Supreme Court has characterized the three-part test in *State* v. *Black* as "well-established." *Van Tran v. State*, 66 S.W.3d at 800 n.12.⁶¹

⁵⁹ The court's decision to adopt *Gregg v. Georgia's* analytical standards prompted two dissenting justices to complain that the court was continuing "to affirm sentences of death by ascertaining whether [Tennessee's] procedural and substantive law satisfies the latest national minimum standard." *State v. Black,* 815 S.W.2d at 192-93 (Reid, C.J., dissenting in part). The chief justice also admonished his colleagues that the court should "assert its full and independent authority under the State Constitution to assure that the process whereby a defendant is sentenced to death is essentially free of error." *State v. Black,* 815 S.W.2d at 194 (Reid, C.J., dissenting in part).

⁶⁰ The court's use of Justice Kennedy's standards prompted one of the justices who had dissented in *State* v. *Black* to chide the court for relying on Eighth Amendment principles "when federal law on this subject appears to be unsettled." *State v. Harris*, 844 S.W.2d at 604 (Daughtrey, J., dissenting). The chief justice did not participate in the decision.

⁶¹ Van Tran v. State may be the first case in which the Tennessee Supreme Court actually found that Tennessee's constitutional prohibition against cruel and unusual punishment provided broader protection than the Eighth Amendment. The court held that executing mentally retarded persons was cruel and unusual punishment, even though the United States Supreme Court had not at that time held that it violated the Eighth Amendment.

Accordingly, for the purpose of our analysis in this case, we will use the three-part test in *State v. Black* as our starting point. In addition, like the majority of the Tennessee Supreme Court, we will use the United States Supreme Court's interpretations and applications of the Eighth Amendment to provide helpful guidance in the absence of more authoritative direction from the Tennessee Supreme Court.

Our interpretation and application of Tenn. Const. art. I, § 16 must also be guided by an awareness of the constitutional limitations on the courts' role in cases of this sort. Gregg v. Georgia, 428 U.S. at 174. We must defer to the General Assembly's broad authority to determine the types and limits of punishment of criminal offenses. Stanford v. Kentucky, 492 U.S. 361, 369-70 (1989); State v. Harris, 844 S.W.2d at 603 (Daughtrey, J., dissenting) (quoting Solem v. Helm, 463 U.S. 277, 290 (1983)). We may not act as legislators, Gregg v. Georgia, 428 U.S. at 175, 96 S. Ct. at 2926, and we must not allow our personal preferences regarding the wisdom of the legislation or our personal distaste for its subject matter to guide our judicial decisions. Furman v. Georgia, 408 U.S. 238, 411, 92 S. Ct. 2726, 2815, 33 L. Ed. 2d 346 (Blackmun, J., dissenting); Baldwin v. Knight, 569 S.W.2d 450, 452 (Tenn. 1978); Mayhew v. Wilder, 46 S.W.3d 760, 785 (Tenn. Ct. App. 2001) (Koch, J., concurring). The Constitution of Tennessee and the United States Constitution are the sole sources of the principles of constitutional adjudication. Thus, a court's prerogative to

However, that very question was before the United States Supreme Court when *Van Tran v. State* was decided, and six months after the *Van Tran v. State* opinion was filed, the United States Supreme Court reached the same conclusion under the Eighth Amendment. *Atkins v. Virginia*, 536 U.S. 304, 350, 122 S. Ct. 2242, 2252, 153 L. Ed. 2d 335 (2002).

review the General Assembly's decisions regarding the nature and extent of punishment for crime ends with an adjudication that the statute passes constitutional muster. *State v. Adkins*, 725 S.W.2d 660, 664 (Tenn. 1987).

B.

The three-part test in *State v. Black* is particularly applicable when courts are called upon to decide whether the legislature's chosen punishment fits a particular criminal offense or whether a punishment meted out by a judge or jury fits the criminal offense of a particular defendant. Accordingly, the courts have modified the analysis slightly in cases focusing on a particular method of execution. The Supreme Court of Connecticut, relying on Weems v. United States, 217 U.S. 349 (1910), fashioned a framework for addressing the constitutionality of a particular method of execution that includes the consideration of the following four factors: (1) whether the method of execution comported with the contemporary norms and standards of society; (2) whether it offends the dignity of the prisoner and society; (3) whether it inflicted unnecessary physical pain; and (4) whether it inflicted unnecessary psychological suffering. State v. Webb, 252 Conn. 128, 750 A.2d 448, 454 (Conn. 2000).

Determining whether the mode of punishment conforms with contemporary norms and standards of decency is arguably the most critical factor of the analysis. *Van Tran v. State*, 66 S.W.3d at 801. The breadth and generality of the constitutional language indicate that the framers of both the Constitution of Tennessee and the United States Constitution anticipated that the courts would define the scope of the prohibition against cruel and unusual punishment. *State v. Black*, 815 S.W.2d at 188-89. Accordingly, the courts have interpreted the provisions in a flexible and dynamic manner. *Gregg v. Georgia*, 428 U.S. at 171, 96 S. Ct. at 2924; *Van Tran v. State*, 66 S.W.3d at 801. The prohibition against cruel and unusual punishment is not limited to the practices condemned at the end of the Eighteenth Century, *Stanford v.* *Kentucky*, 492 U.S. at 369-70, 109 S. Ct. at 2975; *Van Tran v. State*, 66 S.W.3d at 801, and historical acceptance of a particular mode of punishment is not necessarily dispositive. *Gregg v. Georgia*, 428 U.S. at 174 n.19, 96 S. Ct. at 2925 n.19; *State v. Black*, 815 S.W.2d at 188.

Despite the generality of the constitutional text, the courts are not without some guidance when applying the constitutional prohibitions against cruel and unusual punishments in a modern context. The application has been limited to those practices that are contrary to the "evolving standards of decency that mark the progress of a maturing society." *Trop v. Dulles,* 356 U.S. 86, 101, 78 S. Ct. 590, 598, 2 L. Ed. 2d 630 (1958); *Van Tran v. State,* 66 S.W.3d at 800. These standards should reflect the contemporary values and standards of decency of the American society as a whole. *Gregg v. Georgia,* 428 U.S. at 173, 96 S. Ct. at 2925. It is the courts' job to identify these standards, not to determine what they ought to be. *Stanford v. Kentucky,* 492 U.S. at 378, 109 S. Ct. at 2980.

Ascertaining contemporary community standards does not invite individual judges to base their constitutional decisions on their personal preferences or conceptions of decency. The judgment should be influenced by objective evidence to the greatest extent possible. Coker v. Georgia, 433 U.S. 584, 592, 97 S. Ct. 2861, 2866, 53 L. Ed. 2d 982 (1977); Van Tran v. State, 66 S.W.3d at 801. The most common sort of objective evidence relied upon by the courts are the statutes passed by society's elected representatives. Penry v. Lynaugh, 492 U.S. 302, 334, 109 S. Ct. 2934, 2955, 106 L. Ed. 2d 256 (1989); Gregg v. Georgia, 428 U.S. at 173; 96 S. Ct. at 2925; Van Tran v. State, 66 S.W.3d at 801. The courts will decline to rest their decisions regarding a particular punishment on "uncertain foundations" such as opinion polls, the views of interest groups, or positions adopted by professional associations. Stanford v. Kentucky, 492 U.S. at 377, 109 S. Ct. at 2979.

The state and federal constitutional prohibitions against cruel and unusual punishments proscribe more than physically barbarous punishment. They embody broad and idealistic concepts of dignity, civilized standards, humanity, and decency. *Estelle v. Gamble*, 429 U.S. 97, 102, 97 S. Ct. 285, 290, 50 L. Ed. 2d 251 (1978). The basic concept underlying these prohibitions is nothing less than human dignity. While the states and the federal government have the power to punish, Article I, § 16 of the Tennessee Constitution and the Eighth Amendment stand to assure that this power will be exercised within the limits of civilized standards. *Trop v. Dulles*, 356 U.S. at 100, 78 S. Ct. at 598. Rejection by society is a strong indication that a particular punishment does not comport with human dignity. *Furman v. Georgia*, 408 U.S. at 277, 92 S. Ct. at 2746.

Cruel and unusual punishments imply something inhuman and barbarous – more than the extinguishment of human life. *In re Kemmler*, 136 U.S. 436, 447, 10 S. Ct. 930, 933, 34 L. Ed. 519 (1890). To pass constitutional muster, a particular punishment must not involve the unnecessary and wanton infliction of pain. *Gregg v. Georgia*, 428 U.S. at 173, 96 S. Ct. at 2927; *Butler v. Madison County Jail*, 109 S.W.3d 360, 366 (Tenn. Ct. App. 2002). Thus, punishments involving torture and lingering death violate both Tenn. Const. art. I, § 16 and the Eighth Amendment. *See Estelle v. Gamble*, 429 U.S. at 102, 97 S. Ct. at 290; *Campbell v. Wood*, 18 F.3d 662, 683 (9th Cir. 1994); *Moore v. State*, 771 N.E.2d 46, 55 (Ind. 2002).

The sort of cruelty at which both Tenn. Const. art. I, § 16 and the Eighth Amendment are aimed is the cruelty inherent in the method of punishment, not the suffering necessarily involved in any procedure employed to extinguish a human life. *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 463-64, 67 S. Ct. 374, 376, 91 L. Ed. 422 (1947); *State v. Webb*, 750 A.2d at 454. These state and federal constitutional provisions do not require states to select the least severe method of punishment available as long as the method chosen is not cruelly inhuman. *Gregg v. Georgia*, 428 U.S. at 175. Arguments that more humane methods exist do not implicate constitutional concerns and are more properly addressed to the other branches of government. *State v. Black*, 815 S.W.2d at 178; *State v. Adkins*, 725 S.W.2d at 664.

Whether a particular lethal injection protocol constitutes cruel and inhuman punishment is a mixed question of law and fact. *Castillo v. Cameron County*, 238 F.3d 339, 347 (5th Cir. 2001); *Campbell v. Wood*, 18 F.3d at 681-82; *People v. Mantanez*, 98 Cal. App. 4th 354, 119 Cal.Rptr.2d 756, 758 (Ct. App. 2002); *State v. Webb*, 750 A.2d at 453. Accordingly, we will review the trial court's findings of fact in accordance with Tenn. R. App. P. 13(d). However, we reach our own independent conclusion regarding whether the Department's three-drug protocol is consistent with Tenn. Const. art. I, § 16 and the Eighth Amendment.

C.

Mr. Abdur'Rahman has the heavy burden of proving that a societal consensus against executions by lethal injection in general, or executions by lethal injection incorporating Pavulon or potassium chloride in particular, has emerged. *Gregg v. Georgia*, 428 U.S. at 175; *Van Tran v. State*, 66 S.W.3d at 832 (Barker, J., dissenting). Either society has set its face against lethal injections, or the use of Pavulon and potassium chloride, or it has not. *See Stanford v. Kentucky*, 492 U.S. at 378, 109 S. Ct. at 2979. We have determined that Mr. Abdur'Rahman has failed to prove that executions by lethal injection using either Pavulon or potassium chloride or both do not conform to contemporary norms or standards of decency.

For several decades now, medical experts have extolled lethal injection as the most humane method of execution. *State v. Hinchey*, 181 Ariz. 307, 890 P.2d 602, 610 (Ariz. 1995); *Wheeler v. Commonwealth*, 121 S.W.3d 173, 186 (Ky. 2003); *People v. Stewart*, 121 III. 2d 93, 520 N.E.2d 348, 358, 117 III. Dec. 187 (III. 1988). As a result, legislatures in thirty-

seven of the thirty-eight states whose laws authorize capital punishment and the Congress of the United States have selected lethal injection as the sole or primary method of execution.⁶² In addition, state and federal courts have consistently rejected arguments that execution by lethal injection is cruel and inhuman.⁶³ These legislative and judicial determinations provide compelling evidence of society's acceptance of executions by lethal injection. They do not reflect the sort of societal consensus against lethal injection that would support a judicial determination that this method of execution is cruel and unusual.

By the same token, twenty-eight of the states for which information is available as well as the United States Bureau of Prisons use Pavulon as one of the drugs in their lethal injection protocol.⁶⁴ Likewise, twenty-eight of the states and the federal Bureau of Prisons use potassium chloride.⁶⁵ In

⁶² Cooper v. Rimmer, 358 F.3d 655, 659, amended by 379 F.3d
1029 (9th Cir. 2004) (adds concurrence of Judge James R. Browning); Denno, 63 OHIO ST. L.J. at 142-45.

⁶³ See, e.g., Cooper v. Rimmer, 358 F.3d at 657; v. Stewart,
133 F.3d 1253, 1265 (9th Cir. 1998); Hill v. Lockhart, 791 F. Supp.
1388, 1394 (E.D. Ala. 1992); State v. Webb, 750 A.2d at 457-58;
Sims v. State, 754 So. 2d 657, 668 n.20 (Fla. 2000); Moore v. State,
771 N.E.2d at 56 n.4; Wheeler v. Commonwealth, 121 S.W.3d at
186; Spencer v. Commonwealth, 238 Va. 563, 385 S.E.2d 850, 853,
6 Va. Law Rep. 747 (Va. 1989).

⁶⁴ Denno, 63 OHIO ST. L.J. at 146. Twenty-seven states use the same three drugs that are included in Tennessee's protocol. The State of North Carolina uses a two-drug protocol that includes Sodium Pentothal and Pavulon.

⁶⁵ DENNO, 63 OHIO ST. L.J. at 146. The State of New Jersey uses a two-drug protocol that includes Sodium Pentothal and potassium chloride. While the Appellate Division of the Superior Court of New Jersey recently ordered the Department of Correction to reconsider its protocol, it declined to base its decision on the Department's choice of drugs. *In re Readoption With Amendments*

light of the widespread use of both Pavulon and potassium chloride in lethal injection protocols, and in the absence of evidence showing that elected officials have rejected these drugs, we have no factual basis for concluding that a lethal injection protocol incorporating either Pavulon or potassium chloride, or both, does not comport with contemporary norms and standards of society. It also necessarily follows that Mr. Abdur'Rahman has failed to present sufficient evidence to warrant a conclusion that Tennessee's three-drug protocol offends the dignity of the prisoner or society.

D.

Mr. Abdur'Rahman also asserts that Tennessee's lethal injection protocol creates an unreasonable and medically unacceptable risk of subjecting prisoners to excruciating pain and suffering and a protracted death. He bases this claim on (1) the pain resulting from the injections of Pavulon and potassium chloride, (2) the risk of inadequate sedation, (3) the protocol's lack of detailed procedures, and (4) the risk of error inherent in the protocol. Like the other courts that have addressed these claims, we have determined that Mr. Abdur'Rahman's claims are, at best, speculative and that he has failed to prove that prisoners executed in accordance with Tennessee's three-drug lethal injection protocol will experience unnecessary physical pain or psychological suffering.⁶⁶

of Death Penalty Regulations, 367 N.J. Super. 61, 842 A.2d 207, 212-13 (N.J. Super. Ct. App. Div. 2004).

⁶⁶ In his opening statement, Mr. Abdur'Rahman's lawyer conceded that "if everything goes exactly the way it's supposed to go, I don't think the proof is necessarily going to show that it's tortuous."

The evidence is essentially uncontradicted that the injection of either Pavulon or potassium chloride, by themselves, in the dosages required by Tennessee's threedrug protocol would cause excruciating pain. Without sedation, the injection of potassium chloride would, in the words of the anesthesiologist testifying on Mr. Abdur'Rahman's behalf, "deliver the maximum amount of pain the veins can deliver." Similarly, persons receiving a massive dose of Pavulon without sedation would be conscious while they asphyxiated. Thus, the ultimate determination regarding whether Tennessee's three-drug protocol causes unnecessary physical pain or psychological suffering depends on the efficacy of the injection of Sodium Pentothal that precedes the injections of Pavulon and potassium chloride.

The inquiry here should focus on the objective evidence of the pain a prisoner will experience as a result of the procedure. *Fierro v. Gomez,* 77 F.3d 301, 306 (9th Cir.), vacated on other grounds, 519 U.S. 918 (1996); *Campbell v. Wood,* 18 F.3d at 668; *State v. Webb,* 750 A.2d at 455. All the medical experts who testified in this case agreed that the dose of Sodium Pentothal called for in the protocol is lethal. The state's chief medical examiner stated that persons receiving an injection of five grams of Sodium Pentothal mixed in solution with 50 cc of sterile water would be unconscious in approximately five seconds. He also stated that these persons would not feel pain and would never regain consciousness. Finally, he stated that the anesthetic effects of the Sodium Pentothal would remain until the person receiving the injection died.⁶⁷

⁶⁷ This pathologist had performed the autopsy on the only Tennessee prisoner executed using the same three- drug protocol at issue in this case. He found that "the levels of pentothal and pentobarbital in Mr. Coe's body at the time of his death were still well within the normal therapeutic range you would expect in someone who is under general anesthesia."

Other courts have determined that persons receiving smaller doses of Sodium Pentothal than the dose required by Tennessee's protocol would be sufficiently sedated and would have no perception of consciousness or pain. *In re Williams*, 359 F.3d 811, 813-14 (6th Cir. 2004) (declining to grant a stay of execution using two grams of Sodium Pentothal); *State v. Webb*, 750 A.2d at 451-52; *Sims v. State*, 754 So. 2d at 666 n.17, 668 n.19. In light of the evidence that the Sodium Pentothal is administered before the Pavulon and the potassium chloride, and that it remains effective until death occurs, we agree with the trial court's conclusion that Mr. Abdur'Rahman failed to prove that the injection of drugs in accordance with Tennessee's three-drug protocol would cause unnecessary physical pain or psychological suffering.

Mr. Abdur'Rahman's medical expert also criticized Tennessee's protocol because it was "cobbled together by the warden" and because "the design of the protocol is not eloquently thought out." He insisted that the lack of written detailed procedures regarding the handling, preparation, and administration of the drugs created an unacceptable risk that a prisoner would experience a painful death. These arguments overlook the profound difference between the administration of drugs in a clinical setting and the administration of the same drugs to carry out an execution by lethal injection.

Other courts have dismissed similar challenges to the completeness of lethal injection protocols. A lethal injection protocol is not constitutionally infirm simply because it does not specify every step of the procedure in explicit detail. *LaGrand v. Lewis,* 883 F. Supp. at 470; *Sims v. State,* 754 So. 2d at 668. Administering the drugs in a clinical setting requires more skill because of the delicate balance between unconsciousness and death. This balance is not required in an execution. *State v. Webb,* 750 A.2d at 456. The State's medical expert observed that starting an IV line and injecting the drugs are not difficult procedures. Therefore, in light of the evidence regarding the intensive training that the persons involved in the execution must undergo, we find no basis in

the record to conclude that the absence of more detailed written procedures increases the risk of error to such a constitutionally unacceptable level.

Mr. Abdur'Rahman also insists that the lethal injection protocol must be struck down because of the possibility that the persons involved with carrying out an execution might make a mistake. He argues that other states have experienced problems with several executions by lethal injection using protocols similar to the Department's protocol. Like other courts that have considered this argument, we have determined that evidence of other states encountering problems during executions by lethal injection does not prove that Tennessee's three-drug protocol exposes prisoners to an unacceptable risk of the infliction of needless physical pain or psychological suffering. *Poland v. Stewart*, 117 F.3d 1094, 1105 (9th Cir. 1997).

The possibility of human error is implicit in every human endeavor. *State v. Webb*, 750 A.2d at 456. The United States Supreme Court has recognized that unforeseeable accidents do not add a constitutionally impermissible element of cruelty to an execution. *Louisiana ex rel. Frances v. Resweber*, 329 U.S. at 464, 67 S. Ct. at 376-77. Accordingly, the risk of accident need not be eliminated from the process for an execution protocol to survive constitutional review. *Cooper v. Rimmer*, 358 F.3d at 658-59; *Campbell v. Wood*, 18 F.3d at 667; *Reid v. Johnson*, 333 F. Supp. 2d 543, 553, 2004 U.S. Dist. LEXIS 18132, 2004 WL 2022900, at *9 (E.D. Va. Sept. 3, 2004); *State v. Webb*, 750 A.2d at 455.

The State of Tennessee has already carried out one execution by lethal injection using the same protocol being challenged in this case. The pathologist who conducted the post-execution autopsy found "no significant difficulties with the process." The warden at the Riverbend facility testified at some length regarding the training of the persons involved in the execution process and described the practice sessions designed to minimize the risk of mistake in the stressful circumstances of an execution. Considering the record as a whole, we find that Mr. Abdur'Rahman has failed to demonstrate that the Department's approach to an execution by lethal injection is so haphazard or lackadaisical that it invites an unacceptably high risk of otherwise avoidable mistakes occurring.

E.

In summary, we have concluded that Mr. Abdur'Rahman has failed to carry his heavy burden of proving that the Department's three-drug lethal injection protocol violates either Tenn. Const. art. I, § 16 or the Eighth Amendment. He has not proved that the protocol is inconsistent with contemporary norms and standards of society, or that it offends the dignity of prisoners or society. He has likewise failed to produce objective evidence establishing that executions conducted in accordance with the protocol will cause prisoners to experience unnecessary physical pain or psychological suffering. Accordingly, we concur with the trial court's conclusion that executions carried out in accordance with the Department's protocol do not constitute cruel and unusual punishment.

VII.

MR. ABDUR'RAHMAN'S ACCESS TO THE COURTS

Mr. Abdur'Rahman takes particular issue with the use of Pavulon on the ground that it will interfere with his access to judicial remedies. Because of the drug's "masking effect," he insists that it will prevent his lawyer from seeking immediate judicial relief because the lawyer will be unable to ascertain whether he is experiencing unnecessary pain and suffering during the execution process. We find no merit to this claim.

All the experts who testified in this case agreed that Pavulon paralyzes a person's skeletal muscles and that it affects a person's ability to move, but not to think or experience pain. The paralysis could prevent a person who has not been adequately sedated from signaling or communicating that he or she is in extreme discomfort.⁶⁸ The expert testimony was graphically reinforced by the testimony of a patient who described going through an entire surgical procedure without being fully sedated and without the ability to communicate the pain she was experiencing. There is no dispute that Pavulon can mask the pain and suffering of persons who are not completely sedated and that these persons would appear to be peaceful despite the pain they were experiencing.

To prevail with this argument, Mr. Abdur'Rahman must prove (1) that it is likely, or at least probable, that he will experience an unconstitutional level of pain and suffering during the execution process and (2) that his lawyer would be able to observe that he is experiencing this degree of pain and suffering were it not for the injection of Pavulon. Mr. Abdur'Rahman's evidence falls short on both counts.

According to the Department's proof, the injection of Sodium Pentothal administered before the injections of Pavulon and potassium chloride will render any person completely unconscious within seconds and will continue to have a sedative effect until death occurs. There is no evidence that persons who receive an injection of five grams of Sodium Pentothal will not be deeply unconscious shortly after the injection begins and will not remain deeply unconscious until death occurs. Therefore, Mr. Abdur'Rahman has failed to prove that there is a reasonable likelihood, or even a possibility, that prisoners executed in Tennessee will experience any appreciable pain and suffering once the injection of Sodium Pentothal begins. In addition, because it is the injection of Sodium Pentothal, not the later injections of Pavulon, that causes the unconsciousness that prevents the

⁶⁸ Mr. Abdur'Rahman's medical expert testified that if someone were in extreme discomfort, "we would expect their whole body to object and rise to the discomfort."
prisoner from communicating with his or her lawyer, Mr. Abdur'Rahman has also failed to prove that the Pavulon, as a practical matter, interferes with a lawyer's ability to ascertain whether his or her client is experiencing unnecessary pain and suffering.

VIII. MR. ABDUR'RAHMAN'S PREFERENCE

Finally, Mr. Abdur'Rahman argues that Tennessee's lethal injection protocol is an "antiquated method of euthanasia" and asserts that the courts should order the Department to devise another procedure more in keeping with the "developing knowledge or techniques in the field of euthanasia." This argument is misdirected. The court's sole responsibility is to measure Tennessee's lethal injection protocol against the requirements of the Constitution of Tennessee and the United States Constitution. *State* v. *Black*, 815 S.W.2d at 178; *State v. Adkins*, 725 S.W.2d at 664. Once we have determined that the protocol passes constitutional muster, it is not our role to suggest or to require the legislative and executive branches of government to devise a more state-of-the-art procedure.

Mr. Abdur'Rahman's experts insist that executions can be accomplished with equal effectiveness by discontinuing the use of Pavulon and potassium chloride and by replacing Sodium Pentothal with a single lethal dose of sodium pentobarbital.⁶⁹ This may very well be true. However, neither

⁶⁹ Mr. Abdur'Rahman rests this argument, in part, on his claim that neither Pavulon nor potassium chloride serve a useful purpose in the execution process. The State's medical evidence disproves this assertion. The protocol calls for the injection of independently lethal doses of both Pavulon and potassium chloride. The Pavulon causes breathing to cease, and the potassium chloride stops the heart. According to the state medical examiner, the death of a person receiving the lethal injections required by the Department's protocol is the "combination of the three medications administered

Tenn. Const. art. I, § 16 nor the Eighth Amendment requires states to be on the cutting edge of euthanasia. Nor do they require the states to allow condemned prisoners to select the drugs that will be used to carry out their sentence.⁷⁰

The Department's decision to include both Pavulon and potassium chloride in its lethal injection protocol was based on medical advice, not simply on the fact that other states were using the same drugs. The Department's Director of Health Services, a physician employed by the Department, and a consulting anesthesiologist advised the Department that "the drugs and dosages listed are correct for a lethal injection." Because we have already determined that the Department's three-drug protocol does not result in cruel and unusual punishments, Mr. Abdur'Rahman should address his suggestions for improving the Department's lethal injection protocol to the Department and the Tennessee General Assembly.

IX.

We affirm the judgment and remand the case to the trial court for whatever further proceedings may be required. We tax the costs of this appeal to the Tennessee Department of Correction.

as part of the lethal injection protocol." Redundancy is not constitutionally impermissible. Thus, the Department did not violate either Tenn. Const. art. I, § 16 or the Eighth Amendment by combining three independently lethal drugs to assure that an execution is swiftly and reliably accomplished.

⁷⁰ At least one federal judge has suggested that the courts should permit condemned prisoners to override a state's lethal injection protocol and to select the drugs that will be used to execute them. *In re Williams*, 359 F.3d at 814 (Suhrheinrich, J., concurring). We do not concur with this approach.

CHANCERY COURT FOR THE STATE OF TENNESSEE TWENTIETH JUDICIAL DISTRICT, DAVIDSON COUNTY, PART III

ABU-ALI ABDUR'RAHMAN v. Don Sundquist, et al.

No. 02-2236-III

June 1, 2003, Filed

ELLEN HOBBS LYLE, CHANCELLOR, delivered the opinion of the court.

MEMORANDUM AND ORDER

There are persons in our society who decry the use of the death penalty, and there are persons who decry the resources, time and concern expended on death row inmates. Those views are discourse in a vocal democracy. They are not, however, the issue or the framework of the case before this Court.

It is the law of the land that the death penalty is a constitutionally permissible punishment, and it is the law of the land that resources, time and concern shall be expended to insure that punishment by death is not inflicted cruelly and inhumanely. It is within this framework and these bounds that this case arises.

A death row inmate, Abu-Ali Abdur'Rahman, who has been condemned to punishment by death for committing first

75a

degree murder,¹ asserts that Tennessee's method of execution by lethal injection creates an unreasonable risk that the inmate will be paralyzed but will not be rendered unconscious before he is administered horrific painful drugs. The effect, the inmate argues, of such an occurrence is that before the inmate expires he is subjected to torturous pain but because of his total paralysis he is unable to communicate his consciousness and viewers are unable to perceive that the inmate is conscious. The unreasonable risk of this occurring, the inmate asserts, constitutes cruel and inhumane punishment, and is unconstitutional.

The State contends that no method can be error free, and, in any event, the risk alleged by the plaintiff, under Tennessee's lethal injection method, is remote and, therefore, not violative of the constitution.

After conducting an evidentiary hearing where the Court considered the testimony of a veterinarian, an anesthesiologist, a patient who endured an unanesthetized procedure, the warden in charge of the execution in issue, and the State Medical Examiner, the Court concludes that the plaintiff has failed to demonstrate that Tennessee's method of lethal injection is unconstitutional.

The proof established that Tennessee's method is not state of the art. It was developed simply by copying the same

¹ "The death sentence was imposed pursuant to the jury's finding of three aggravating circumstances: (1) the defendant was previously convicted of one or more felonies whose statutory elements involved the use of violence to the person; (2) the murder was especially heinous, atrocious or cruel in that it involved torture or serious physical abuse beyond that necessary to produce death; and (3) the murder was committed while the defendant was engaged in committing, or was an accomplice in the commission of, or was attempting to commit, or was fleeing after committing or attempting to commit, any first-degree murder, arson, rape, robbery, burglary, theft or, kidnapping." *Abu-Ali Abdur'Rahman* v. *Bell*, 226 F.3d 696, 697-99 (6th Cir. 2000).

method currently in use by some thirty other states. The method could be updated with second or third generation drugs to, for example, streamline the number of injections administered. Moreover, the method's use of Pavulon, a drug outlawed in Tennessee for euthanasia of pets, is arbitrary. The State failed to demonstrate any need whatsoever for the injection of Pavulon.

But whether dated or discomfiting in terms of modern veterinary science, the method was shown by the proof to be reliable in rendering an inmate unconscious, if not dead, before the paralytical and lethal painful drugs take effect. Thus, the plaintiff failed to demonstrate that Tennessee's lethal injection method poses a reasonable likelihood of a cruel or inhumane death.

The findings of fact and conclusions of law on which the Court bases its determination are as follows.

The plaintiff, Abu-Ali Abdur'Rahman, is a death row inmate who has been condemned to punishment by death for first degree murder. The plaintiff is scheduled to be executed on June 18, 2003, by the State of Tennessee using the lethal injection method.

The plaintiff filed this lawsuit asserting that Tennessee Code Annotated section 40-23-114, death by lethal injection, as it shall be applied by the Tennessee Department of Correction to the plaintiff's execution, violates the prohibition against cruel and inhuman treatment provided by the Eighth Amendment of the United States Constitution, and Article I, § 16 of the Tennessee Constitution. During the evidentiary hearing of this matter, the plaintiff also argued that the application of section 40-23-114 violates his constitutional right of free access to the courts guaranteed by the United States Constitution.

The case is before this Court pursuant to Tennessee Code Annotated section 4-5-225 which vests authority in the Chancery Court of Davidson County to determine whether the application of a statute within the primary jurisdiction of an agency (in this case the Tennessee Department of Correction) is unconstitutional.

The method of lethal injection in Tennessee consists of the injection of three drugs: sodium thiopental (Pentothal), pancuronium bromide (Pavulon), and potassium chloride. Warden Bell testified that prior to the execution be uses a kit to prepare the Pentothal. The Pentothal comes in a powder form which he is required to mix with sterile water with the use of syringes. He sticks a needle into the sterile water vial, withdraws the necessary amount to mix with the Pentothal powder. He then shakes the mixture and draws it into a big syringe with sterile water. The shelf life of the Pentothal mixture is very short, 24 hours or less. The shelf life of the powder is much longer, in the range of six months. That is why the Pentothal is not converted to a liquid state until just before the execution. The Pavulon and potassium chloride come in a liquid state and do not have to be mixed. Seven syringes are prepared: one syringe of Pentothal, two syringes of saline, two syringes of Pavulon, two syringes of potassium chloride. Then seven exact replicas of these syringes are prepared as backups in case the first injection procedure fails and a second must be used. The syringes are labeled with numbers 1 through 7 in the sequence that they are to be injected. They are also color coded, i.e. a color corresponds with the substance in the syringe. The syringes are not labeled with the names of the substances in them.

After the inmate is transported to the execution chamber by gurney, IV catheters are placed in both of the inmates arms by certified EMT paramedics. If necessary there are execution team members, prison staff, who have been through a course of training in intravenous therapy who can also perform this function. In the event that the IV technicians are unable to establish a port due to the unavailability of a suitable vein, a physician is available to perform a "cut down" procedure where an incision is made to gain direct access to a vein. The warden, deputy warden and a chaplain are present in the execution chamber. After the flow of normal saline is begun, the paramedics leave the execution chamber.

The warden then signals the executioner, who is located in a chamber next to the execution chamber, but behind a window with a portal for the IV lines. The warden gives the word to the executioner to sequentially inject the Pentothal, saline, Pavulon, saline and sodium chloride into the IV tubing connected to the catheter placed in the inmate's arm. A quick push of the syringes is required.

There is a camera above the gurney in the death chamber and a monitor in the executioner's room which allows the executioner to observe the flow of the drugs to the IV. In addition, the warden is located in the execution chamber, approximately a foot from the inmate's head, and the warden can see the flow of the drugs through the IV tubing and can notify the executioner if the line becomes clogged or if other visible problems are encountered.

Following the injection of the drugs and a five-minute waiting period, the condemned inmate is examined by a physician, who waits in an area adjacent to the death chamber during the administration of the drugs, and death is pronounced.

A significant part of the plaintiff's challenge to Tennessee's lethal injection method is the use of Pavulon. Dr. Heath, an assistant professor of clinical anesthesia at Columbia University who obtained his bachelor of arts from Harvard University in 1983 magna cum laude and graduated with honors from University of North Carolina Medical School in 1987 and whose practice is devoted one-third to clinical patient care, one-third education of residents and fellows and one-third research, testified that Pavulon is a neuromuscular blocking agent. Its effect is that it renders the muscles unable to contract but it does not affect the brain or the nerves. It is used in surgery to assure that there is no movement and that the patient is securely paralyzed so that the surgery can be performed without contraction of the muscles. Pavulon is never applied until the patient is under a proper plane of anesthesia. The anesthesia must first be administered such that the patient is unconscious and does not feel, see or perceive the procedure. Once the anesthesia has taken effect, the Pavulon paralyzes the patient so that the surgery can be performed. Dr. Heath testified to what he termed the "chemical veil" of Pavulon. He stated that Pavulon, because of its paralytic effect on the muscles, makes the patient look serene. The face muscles cannot move or contract or any muscles to show pain or suffering.

Testimony was also provided by Carol Weihrer who endured a surgery where Pavulon was administered and the anesthesia was not effective. Ms. Weihrer testified that she was able to bear, perceive and feel everything that was going on in her surgery. She was able to think. Torturously she was unable to move because of the effects of the Pavulon. She testified that she was attempting with all of her will to communicate that she was still conscious but that she was unable to because of the Pavulon.

Dr. Geiser, a professor of veterinary science at the University of Tennessee School of Agriculture, testified similarly to the effect of Pavulon on animals. He stated that before 1980 it was not the practice to use Pavulon and that it is not acceptable under the American Veterinary Association guidelines to use Pavulon by itself or in combination with other drugs in pet euthanasia. He testified that the use of Pavulon in euthanasia of animals has been outlawed in Tennessee and a number of other states. Dr. Geiser testified that Pavulon could potentially produce an inhumane situation with animals because it causes respiratory arrest without arrest of the central nervous system. He testified that the effect is like asphyxiation.

Significantly, there was no proof from the State that the Pavulon is necessary to the lethal injection process. No proof was provided by the State for the use of Pavulon in its lethal injection process. The State's expert, Dr. Levy, on crossexamination, testified that he did not know of any legitimate purpose for the use of Pavulon in the Tennessee lethal injection process. He agreed that the injection of Pavulon without anesthesia would be a horrifying experience.

Dr. Heath testified that if the Pavulon were eliminated from the Tennessee lethal injection method, it would not decrease the efficacy or the humaneness of the procedure.

In this matter the Court shall analyze the plaintiff's claims under the Eighth Amendment to the United States Constitution and Article I § 16 of the Tennessee Constitution. To the extent to which the plaintiff asserts that Tennessee's lethal injection method violates his rights to substantive due process by exposing him to an unnecessary risk of pain and suffering, the Court concludes as a matter of law that such a claim is better analyzed under the cruel and unusual punishment provision of the State and Federal Constitutions. See County of Sacramento v. Lewis, 523 U.S. 833, 118 S. Ct. 1708, 1714, 14 L. Ed. 2d 1043 (1998), quoting Graham v. Connor, 490 U.S. 386, 395, 109 S. Ct. 1865, 104 L. Ed. 2d 443 (1989) ("where a particular amendment provides and explicit textual source of constitutional protection against a particular sort of government behavior, that amendment, not the more generalized notion of substantive due process, must be the guide for analyzing these claims."). In United States v. Lanier, 520 U.S. 259, 272, 117 S. Ct. 1219, 137 L. Ed. 2d 432 n.7 (1997), the Court explained that if a constitutional claim is covered by a specific constitutional provision such as the Fourth or Eighth Amendment the claim should be analyzed under the standard appropriate to that provision not wider substantive due process.

The law which this Court is required to apply in determining the plaintiff's claims are the United States and Tennessee Constitutions as ruled upon by the United States Supreme Court and the Tennessee Supreme Court.

The United States Supreme Court has explained that the Eighth Amendment prohibition of the United States

Constitution is that cruel punishment involves torture or a lingering death. *In re Kemmler*, 136 U.S. 436, 447, 10 S. Ct. 930, 933, 34 L. Ed. 519, 524 (1890). The Eighth Amendment prohibition forbids punishments that involve unnecessary and wanton inflictions of pain. *Estelle v. Gamble*, 429 U.S. 97, 103, 97 S. Ct. 285, 290, 50 L. Ed. 2d 251 (1976).

The Tennessee Supreme Court has held that no greater protection is provided under Article I, § 16 of the Tennessee Constitution than under the Eighth Amendment to the United States Constitution, *Cozzolino v. State*, 584 S.W.2d 765, 767 (Tenn. 1979), and challenges under Article I, § 16 of the Tennessee Constitution use the analysis and holdings of federal courts on the Eighth Amendment.

The United States Supreme Court has held that in determining whether a method of execution violates the Eighth Amendment prohibition against cruel and unusual punishment, a court shall examine (1) whether the method of execution comports with contemporary norms and standards of society; (2) offends the dignity of the person and society; (3) whether it inflicts unnecessary physical pain; and (4) whether it inflicts unnecessary psychological suffering. *Weems v. United States*, 217 U.S. 349, 30 S. Ct. 544, 54 L. Ed. 793 (1910).

As to whether a risk of suffering creates a constitutional violation, the United States Supreme Court in *Louisiana ex rel. Francis v. Reswaber*, 329 U.S. 459, 464, 67 S. Ct. 374, 91 L. Ed. 422 (1947) (plurality opinion) held that a method of execution is viewed as cruel and unusual punishment under the federal constitution when the procedure for execution creates a substantial risk of wanton and unnecessary infliction of pain, torture or lingering death. In addressing the constitutionality of a second attempt at an electrocution after the first attempt failed, the Court rejected the defendant's argument that subjecting him to a second electrocution constituted cruel and unusual punishment. The Court stated that the fact that an unforeseeable accident prevented the

prompt consummation of the sentence did not add an element of cruelty to a subsequent execution. *Id*.

Finally, the United States Supreme Court has stated that the determination of whether a punishment violates the Eighth Amendment considers the evolving standards of decency that mark the progress of a maturing society. Estelle v. Gamble, 429 U.S. 97, 103, 97 S. Ct. 285, 290, 50 L. Ed. 2d 251 (1976). Evidence of legislative trends is particularly relevant when measuring evolving standards of decency. Penry v. Lynaugh, 492 U.S. 302, 331, 109 S. Ct. 2934, 2953-54, 106 L. Ed. 2d 256 (1989). In Atkins v. Virginia, the Supreme Court held that executions of mentally retarded criminals were "cruel and unusual punishments" prohibited by the Eighth Amendment. 536 U.S. 304, 122 S. Ct. 2242 (2002). Significant in this decision was the review of recent trends of state legislatures prohibiting the use of the death penalty for mentally retarded criminals. These trends were found to be representative of "evolving standards of decency." Id. at 321.

Starting with an assessment of the factors established by the United States Supreme Court, the first being evidence of norms and standards, the Court finds the most compelling evidence to be Warden Bell's testimony that some 30 states use the same lethal injection method as Tennessee, including use of Pavu1on. Tennessee copied other states in developing its method.

In opposition to Warden Bell's testimony was the plaintiff's expert Dr. Heath. He was critical of the Tennessee lethal injection method in its use of Pentothal, the physical separation of the executioner (who administers the drugs to the prisoner in another room with long tubing that run from the prisoner through a portal in the wall to a syringe held by the executioner), the absence of a physician in the execution chamber to assure intake of the Pentothal, and the failure to label the syringes with the names of the drugs—as deviations from standard anesthesiologica1 practice. Dr. Heath criticized the use of Pentothal, stating that he had not used it in the last five years. Its use, he stated, is mostly as an induction drug to prepare a patient for another anesthetic. Sodium pentobarboto1 is more stable and is more commonly used. He also testified that the person administering the drugs should be in close physical proximity to assure proper intact and that a physician should attend the intact of drugs. He additionally asserted that it was unacceptable to color code the syringes or number them in the absence of labeling them with the drugs they contain.

Dr. Heath's testimony, when weighed against the proof that some 30 states use the same lethal injection method as Tennessee, did not persuade the Court that Tennessee's lethal injection method does not comport with standards and norms. While somewhat applicable, the surgical setting in which Dr. Heath's experience is from, is nevertheless distinguishable from an execution.

A paramount concern in an execution is security. The condemned has committed a violent act, and he is facing termination of life. Under these circumstances it is necessary to deviate from the surgical norm of physical proximity. It is necessary, for security reasons, to assure that the executioner is securely removed from the condemned. The separateness of the executioner and the syringes containing the lethal dosages, while it does decrease the executioner's ability to monitor intake of the Pentothal, is for good reason. To make up for the separateness of the executioner, the Tennessee lethal injection method has a TV monitor in the execution room, a camera above the gurney, and the warden is located in the execution room within a foot of the condemned's head. The warden has been trained on detecting problems such as crimping of the IV tine, or failure of the injection to go into the vein. Simply stated, the standard for an operating room of physical proximity is not a completely accurate analogy.

The same is true with labeling. In a surgical setting, many drugs are present and available. Syringes must be labeled to distinguish them from other drugs in the area. Moreover the physicians administering the drugs are more familiar with chemical names than numbering or color coding. Chemical name labeling is an effective method in a surgical setting.

The holder of the syringes, the executioner, however, is not a doctor. Color coding and sequential numbering is as effective, if not more so, than chemical name labeling, for a nonphysician. Also unlike a surgical setting, no other drugs or syringes are present—only the fourteen necessary for the lethal injection.

The use of Pentothal in the execution process, as well, is different from a surgical setting. Dr. Heath testified that Pentothal is used currently as mostly an induction drug and not the dominant agent to render the patient unconscious. In surgery, however, maintaining viability is critical. That is not a concern in the execution. A large dose of Pentothal is applied in the Tennessee lethal injection method—five grams. The testimony from the experts was that a dosage in this amount in and of itself should result in death. Dr. Levy testified that in the case of the Coe execution the administration of the five grams of Pentothal was the cause of death.

Another difference between a surgical setting and an execution is that the Tennessee Medical Association has issued an opinion that physicians violate ethical standards if they participate in an execution. While the Tennessee Supreme Court has rejected that opinion, nevertheless there was testimony that there are individualized standards of ethics among physicians not to participate in an execution. Those individual ethical principles, as a practical matter, render it difficult if not impossible to find an individual physician who would consider it consistent with his professional ethical standards to monitor the induction of a lethal injection. Dr. Heath's requirement of a physician monitoring is an unlikely one. In addition to Dr. Heath's testimony concerning norms and standards, the plaintiff used the testimony of Dr. Geiser, a professor of veterinary science at the University of Tennessee. He testified that in animal euthanasia it is significantly below the standard of acceptable practice to use an injection of Pavulon. The use of that drug in pet euthanasia is outlawed in Tennessee and a number of other states.

Dr. Geiser's testimony gives superficial expert support to the plaintiff's argument that if Pavulon is unacceptable for pet euthanasia it necessarily is unacceptable for euthanasia of human beings. But to substantively be able to use animal euthanasia as an analogy for a human execution, one has to know the reason why Pavulon was outlawed in pet euthanasia. Dr. Geiser provided some of that information. He testified that the medical problem with Pavulon in animal euthanasia is that Pavulon masks whether the animal is really unconscious or dead. What was not testified to but is clear from Tennessee's statutes on pet euthanasia is that animal euthanasia is carried out much more frequently in less regulated circumstances² than the termination of human life

² "Euthanasia shall be performed only by a licensed veterinarian, Tennessee veterinarian medical technician or an employee or agent of a public or private agency, animal shelter or other facility operated for the collection, care and/or euthanasia of stray, neglected, abandoned or unwanted nonlivestock animals, provided that the Tennessee veterinarian medical technician, employee or agent has successfully completed a euthanasiatechnician certification course. The curriculum for such course must be approved by the board of veterinary medical examiners and must include, at a minimum, knowledge of animal anatomy, behavior and physiology; animal restraint and handling as it pertains to euthanasia; the pharmacology, proper dosages, administration techniques of euthanasia solution, verification of death techniques, laws regulating the storage, security and accountability of euthanasia solutions; euthanasia technician stress management and the proper disposal of euthanized nonlivestock animals." TENN. CODE ANN. § 44-17-303.

such that there is a need to outlaw the use of Pavulon in pet euthanasia. Thus, what the Court does conclude as to the outlawing of Pavulon in Tennessee in pet euthanasia is that it is not against the norm to use Pavulon in lethal injections but the use of Pavulon requires that the accused be sufficiently anesthetized prior to the injection of the Pavulon to assure unconsciousness.

The Court, therefore, finds that neither the testimony of Dr. Heath on anesthesiological standards nor Dr. Geiser's testimony on veterinary euthanasia outweighs the evidence that 30 some states use the Tennessee method. The Tennessee method comports with norms and standards.

Where the plaintiff's argument concerning the Tennessee statutory prohibition against the use of Pavulon in animal euthanasia is most compelling is in assessing, under the standards articulated by the United States Supreme Court, whether the method of execution offends the dignity of the person and society. As Dr. Geiser and Dr. Heath explained, the problem with Pavulon and why it was medically outlawed for use on pets is that it paralyzes all the muscles but not the brain, consciousness or nerves. Thus, the subject gives all the appearances of a serene expiration when actually the subject is feeling and perceiving the excruciating painful ordeal of death by lethal injection.

Coupled with the testimony of the paralytic effect of Pavulon is that the State failed to provide any proof of the reason for its use in the lethal injection method. There was no testimony that the purpose of Pavulon in Tennessee's lethal injection method was to hasten death. The testimony was that Pavulon has no pain relieving properties. Simply stated, the record is devoid of any expert testimony on behalf of the State of Tennessee to explain why Pavulon is used.

From this void of proof and in conjunction with the proof on the effects of Pavulon, the plaintiff argues that the reason Pavulon is used by the State is to mask or put a chemical veil over what death by lethal injection really looks like. The Pavulon gives a false impression of serenity to viewers, making punishment by death more palatable and acceptable to society.

The plaintiff's chemical veil argument raises the age-old concern of a society conceived as colonists and schooled duting maturing in the abuses of power by government. The chemical veil taps into every citizen's fear that the government manipulates the setting and gilds the lily, whether it be with reporting on the economy or election results, to orchestrate and manipulate public reaction.

The proof before this Court did not demonstrate that the State, in creating Tennessee's lethal injection method, included use of Pavulon to create a chemical veil. Instead, the proof demonstrated that, if anything, Pavulon was included by the State out of ignorance and by just copying what other states do. In preparing the lethal injection method used by Tennessee, the proof revealed that the State did not consult physicians or pharmacologists. The State "copycatted," using what a majority of other states were doing, including the use of Pavulon. The Court, therefore, concludes that there was no showing of malice or an attempt to create a chemical veil in Tennessee's use of Pavulon.

But regardless of the State's ignorance and even if it did not intend to create a chemical veil, the fact that Pavulon has the property of creating a chemical veil raises the issue of whether there is offense to the dignity of the prisoner and the public. As will be discussed in more detail later in assessing whether the Tennessee lethal injection method inflicts unnecessary physical suffering and psychological suffering, the proof demonstrated that there is less than a remote chance that the condemned would ever be conscious by the time the Pavulon is administered. The chances of the Pavulon acting as a chemical veil and working a deception on the public are so much less than remote, that the Court concludes that its use does not offend the dignity of the prisoner or the public. But the use of Pavulon is problematic because it is unnecessary. As stated above, the State failed to demonstrate any reason for its use. The record is devoid of proof that the Pavulon is needed. Thus, the Court concludes that, while not offensive in constitutional terms, the State's use of Pavulon is "gilding of the lily" or, stated in legal terms, arbitrary.

The final matter the Court must examine according to the factors set out by the United States Supreme Court is whether the method inflicts unnecessary physical pain and psychological suffering.

All of the experts testified that if the lethal injection method proceeds as planned it will not result in physical or psychological suffering: the five grams of Pentothal will render the prisoner unconscious or dead, Pavulon is injected and paralyzes the prisoner, and the sodium chloride stops the heart.

The focus of the dispute is whether there is a reasonable likelihood that the Pentothal will not take effect such that the prisoner feels the full affects of the Pavulon and the sodium chloride and, because of the Pavulon, it is unknown to those witnessing the execution that the prisoner is being subjected to such torture. Sodium chloride is extremely painful. Pavulon, as explained above, is psychologically horrific. There is no doubt, as established by the testimony of Ms. Weihrer, the patient who underwent an unsuccessful anesthesia administration, that failure of the anesthetic to block consciousness and allow the patient to experience the Pavulon is torturous.

The plaintiff attempted to establish that there is a reasonable risk under Tennessee's lethal injection method that the inmate will not be rendered unconscious by attacking the competency of almost every step of the procedure. Dr. Heath criticized the risks associated with Pentothal which, once in liquid form, has a short shelf life such that its potency could be compromised. The use of seven syringes, he testified, is a complex procedure which he has never done and is difficult

on the executioner to maintain an aggressive push. The numerous contingencies on administering an IV-missing a vein, an extravenous injection, solution washing back into the IV bag-require a physician to monitor the intake of the Pentothal not just paramedics. The physical distance between the executioner, the person pushing the Pentothal syringe, and the inmate is a risky monitoring system. That there is no reason for the use of Pavulon, Dr. Heath testified. significantly increases the risk of suffering in the procedure. That the fall back procedure for inability to locate a vein is a cut down procedure instead of a percutaneous, more modern procedure, increases the risk of suffering. When all of these contingencies are considered and that the Tennessee method is, according to Dr. Heath "sloppy" and not state of the art, he opined that the procedure is reasonably likely to not render the prisoner unconscious before the injection of the painful drugs.

Dr. Heath's impressive education and practice credentials and his excellent explanations during his testimony made him a credible witness. But his testimony was not based on direct experience with an execution. His testimony was hypothetical and metaphysical.

In contrast was the testimony of Dr. Bruce Levy, the State Medical Examiner and the Medical Examiner for Davidson County, who performed the autopsy on prisoner Coe after he was executed in Tennessee by the same method proposed to be used on the plaintiff. Dr. Levy's autopsy is direct evidence of the effects of the Tennessee lethal injection method in question in this case.

The autopsy revealed that the level of Pentothal remaining in the body after prisoner Coe's execution was not only therapeutic, i.e. the prisoner lost consciousness before the effects of the Pavulon, but it was at a lethal level. The therapeutic, lethal level of Pentothal in the body following execution demonstrates that the potency of the Pentothal was in no way compromised and that there was no problem with the IV injection and intake. Dr. Levy testified that he observed that there were two "stick" points in the arm which indicated that the first time the IV was attempted on prisoner Coe another site had to be obtained. Despite that a second attempt had to be made to put in the IV, the procedure was nevertheless completed effectively. This proof of the two sticks demonstrates the ability of the IV team to effectively complete the process when encountering difficulty. The results of the Coe autopsy, direct evidence of the effects of Tennessee's lethal injection method, carry great weight with the Court.

Like Dr. Levy, Warden Bell also provided direct testimony of the effects of the Pentothal based on his presence in the execution chamber during the Coe execution. Warden Bell testified that shortly after the Pentothal was pushed through the IV to prisoner Coe, the prisoner said something along the tines that he "was gone" and then the prisoner was unconscious.

In contrast to the State's direct evidence of the effects of the Tennessee lethal injection method, Dr. Heath's only testimony in that regard was his viewing of the Timothy McVeigh execution. Dr. Heath testified that he thought he saw tearing by prisoner McVeigh. Dr. Heath testified that this would have indicated that the prisoner was not unconscious and was feeling the effects of the painful drug injection. Significantly, however, Dr. Heath did not present to the Court any autopsy reports supportive of his theory about the McVeigh execution or autopsy reports from any other executions to demonstrate that the initial drug was ineffective in rendering the prisoner unconscious.

Also counterpoised against Dr. Heath's testimony of the deficiencies of Tennessee's lethal injection method was the testimony of Warden Bell of the precautions taken and training engaged in to minimize error. Warden Bell testified that he does not mix the Pentothal to a liquid form until the time of the execution. To lower any risks with the Pentothal,

Warden Bell has a kit which is provided by the medical supplier where the Pentothal comes in powder form and contains an expiration date. Warden Bell trains regularly on preparing the Pentothal. Warden Bell also testified that he is the one who is in charge of the execution process. He signals when the injection is to begin and if there is a problem he decides what to do. Warden Bell is located one foot from the head of the prisoner. Warden Bell testified that once a month he and other persons are trained on the execution process including insertion of an IV catheter.

As to the risk posed by use of paramedics in the IV process, the Court credits Dr. Levy's testimony that it is reasonable in his expert opinion to assume that paramedics would not have any trouble inserting an IV considering their training and that they are required to do so under all kinds of emergency situations.

The Court also credits Dr. Levy's testimony that a cut down procedure to find a vein if the IV fails, while not as state of the art as a percutaneous procedure, is nevertheless an acceptable back-up procedure to use to obtain an injection site. The Court further credits Dr. Levy's testimony that it is a simple procedure which physicians are taught in medical school, and does not pose an unreasonable excessive risk.

The Court therefore concludes that the proof demonstrated that there is less than a remote chance that the prisoner will be subjected to unnecessary physical pain or psychological suffering under Tennessee's lethal injection method. That proof is not sufficient to demonstrate that the punishment is unconstitutional. *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 464, 67 S. Ct. 374, 91 L. Ed. 422 (1947).

It is therefore ORDERED, pursuant to Tennessee Code Annotated section 4-5-225, which authorizes the Chancery Court of Davidson County to pass on the legal validity of a statute as administered by an administrative agency of the State, that the application by the Tennessee Department of Correction of lethal injection pursuant to Tennessee Code Annotated section 40-23-114 does not violate the United States Constitution or the Tennessee Constitution. Accordingly, the plaintiff's petition is dismissed with prejudice.

Consistent with the roles of chancery court that all orders to be final must tax costs, and consistent with the rule that the nonprevailing party bears the costs, the Court taxes costs to the plaintiff.