APPENDIX A

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF WASHINGTON

DAROLD R.J. STENSON,

Plaintiff,

vs.

ELDON VAIL, Secretary of Washington Department of Corrections (in his official capacity), et al.,

Defendants.

No. CV-08-5079-LRS

ORDER GRANTING STAY

In the captioned action, Plaintiff has filed a complaint for injunctive and equitable relief under 42 U.S.C. Section 1983, alleging violations of his Fifth, Eighth, and Fourteenth Amendment rights. This complaint was filed on November 21, 2008. Plaintiff moves for an order temporarily restraining the Defendants from scheduling or carrying out his execution until the conclusion of the captioned action. (Ct. Rec. 5). Telephonic hearing was conducted on November 24 and November 25.

On or about October 29, 2008, Plaintiff commenced an action in the Thurston County Superior Court for the State of Washington which, like the captioned action, seeks declaratory and injunctive relief under the Eighth and Fourteenth Amendments "to be free from arbitrary and capricious Washington Department of Corrections ("DOC") protocols and procedures" regarding lethal injection. On November 21, 2008, the Thurston County Superior Court entered an order which declined to dismiss Plaintiff's claims related to lethal injection (although the court did dismiss Plaintiff's claims related to hanging). The superior

APPENDIX A

court, however, denied Plaintiff's motion for preliminary injunction, finding Plaintiff had not demonstrated a likelihood of success on the merits. The superior court certified this decision for immediate review pursuant to Washington Rules of Appellate Procedure (RAP) 2.3(b). Pursuant thereto, Plaintiff has filed an interlocutory appeal with the Washington Supreme Court asking it to grant discretionary review and stay the execution currently scheduled for 12:01 a.m. on December 3, 2008.

Because of the ongoing and pending proceedings in the Washington courts, a serious question is raised whether, pursuant to *Younger v. Harris*, 401 U.S. 37, 49-53, 91 S.Ct. 746 (1971), this federal court should abstain and dismiss the captioned federal action. Important state interests are involved in the litigation before the Washington courts. On the other hand, a federal plaintiff must "have a full and fair opportunity to litigate his constitutional claim" in the course of state proceedings. *Ohio Civil Rights Comm'n v. Dayton Christian Schools, Inc.*, 477 U.S. 619, 627, 106 S.Ct. 2718 (1986). This court should not abstain unless a plaintiff's constitutional claims can be "timely decided by a competent state tribunal." *Gibson v. Berryhill*, 411 U.S. 564, 577, 93 S.Ct. 1689 (1973). At this juncture, considering the December 3, 2008 execution date, there is considerable uncertainty whether Plaintiff's constitutional claims will be timely decided on their merits by the Washington courts. **ACCORDINGLY, PENDING FURTHER ORDER OF THIS COURT, PLAINTIFF'S EXECUTION, WHETHER BY HANGING OR LETHAL INJECTION, IS STAYED, AND PROCEEDINGS IN THE CAPTIONED ACTION ARE STAYED**. Plaintiff's Motion For Temporary Restraining Order (Ct. Rec. 5) and Motion For Preliminary Injunction (Ct. Rec. 12) are **STAYED**.

While this stay has the same effect as a temporary restraining order or preliminary injunction and is based on the policy rationale and reasoning underlying those remedies, this court is not labeling it as such in recognition that it

has not made a final decision on the propriety of *Younger* abstention. At this time, this court is not making any determination regarding likelihood of success on the merits and its stay is not intended to reverse the Thurston County Superior Court's denial of a preliminary injunction. It is still possible that Plaintiff will be afforded a full and fair opportunity to litigate the merits of his federal constitutional claims in the Washington courts, the venue he initially chose for adjudication of those claims. There are a number of different scenarios which could play out with regard to the action commenced in Thurston County Superior Court. Regardless of what the Washington Supreme Court does, or beyond that what the U.S. Supreme Court may do regarding the superior court's denial of the motion for preliminary injunction, the fact remains that the superior court has not dismissed the federal constitutional claims related to lethal injection and has yet to adjudicate those claims on their merits.

Of course, in the meantime, Plaintiff or Defendants may seek an interlocutory appeal to the Ninth Circuit Court of Appeals regarding the propriety of this stay order. To the extent a right of an interlocutory appeal does not exist pursuant to 28 U.S.C. Section 1292(a)(1), **THE COURT CERTIFIES THIS MATTER FOR AN IMMEDIATE APPEAL TO THE NINTH CIRCUIT COURT OF APPEALS ON THE BASIS THAT THIS STAY ORDER "INVOLVES A CONTROLLING QUESTION OF LAW AS TO WHICH THERE IS A SUBSTANTIAL GROUND FOR DIFFERENCE OF OPINION AND THAT AN IMMEDIATE APPEAL FROM THE ORDER MAY MATERIALLY ADVANCE THE ULTIMATE TERMINATION OF THE LITIGATION." 28 U.S.C. §1292(b).**

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IT IS SO ORDERED. The District Executive shall forward copies of this order to counsel.

DATED this 25th of November, 2008.

s/Lonny R. Suko

LONNY R. SUKO
United States District Judge

APPENDIX B

UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

DAROLD J. STENSON, Plaintiff - Appellee, v. ELDON VAIL, Secretary of Washington Department of Corrections (in his official capacity), et al., Defendant - Appellant.	No. 08-35974 D.C. No. 2:08-cv-05079-LRS Eastern District of Washington, Spokane ORDER

Before: SCHROEDER, KLEINFELD, and BEA, Circuit Judges

The State of Washington's motion to vacate the district court's stay of execution is denied as moot in light of the existing stay entered by the state court. The denial is without prejudice to renewal of the motion under changed circumstances. The Clerk's November 25, 2008 scheduling order is vacated.

APPENDIX B

APPENDIX C

☐ EXPEDITE
☒ No hearing set
☐ Hearing is set
Date: ____
Time: _____
The Honorable Chris Wickham

HONORABLE CHRIS WICKHAM

SUPERIOR COURT OF THE STATE OF WASHINGTON
FOR THURSTON COUNTY

DAROLD R. J. STENSON,

Plaintiff,

v.

ELDON VAIL; STEPHEN SINCLAIR; MARC STERN; CHERYL STRANGE; WASHINGTON STATE DEPARTMENT OF CORRECTIONS, and DOES 1-50

Defendants.

No. 08-2-02080-8

ORDER DENYING IN PART AND GRANTING IN PART DEFENDANTS' MOTION TO DISMISS (PROPOSED)

The Court, having considered Defendants' CR 12(b)(6) Motion to Dismiss, Plaintiff's Complaint and Amended Complaint for Declaratory Judgment and Injunctive Relief, the response of the Plaintiff, reply, sur-reply, and all other submissions on this motion, and the remaining files and records herein, does hereby find and ORDER that Defendants' Motion to Dismiss is DENIED in part and GRANTED in part as follows:

Perkins Coie LLP
1201 Third Avenue, Suite 4800
Seattle, WA 98101-3099
Phone: 206.359.8000
Fax: 206.359.9000

APPENDIX C

1. Defendants' argument that this case should be dismissed because it is a collateral attack on the judgment is denied. Plaintiff requests judicial review of the method of execution for the Plaintiff and others which is broader than, and not directed at, a specific provision of the judgment or sentence.
2. Defendants' argument that this case should be transferred to the Washington Supreme Court is denied. CrR 7.8 does not provide a vehicle for transfer, and the Court is not aware of any such vehicle. With respect to the inquiry to be made under *Baze*, there is value in having a trial court consider evidence, enter findings and conclusions and provide a record for appellate court review.while The Court of Appeals and the Supreme Court are not equipped for discovery and fact finding.
3. Defendants' argument that this case should be dismissed because it is barred by *res judicata* is denied. The doctrine of *res judicata* precludes issues that were or should have been raised in prior actions. This doctrine does not apply. There are other inmates facing the death penalty so Mr. Stenson was not under an obligation to bring this challenge at an earlier time. Because the claims pled go beyond Mr. Stenson, there was no obligation that they be raised in his prior criminal proceedings.
4. Defendants' argument that this case should be dismissed on statute of limitations grounds is granted as to claims based on hanging, but denied as to claims based on lethal injection. As to hanging, the statute of limitations began to run at the time that the sentence became final. As to lethal injection, the statute of limitations period was reset when DOC amended its policy in June 2007 and again on October 25, 2008, Plaintiff is well within the statute.

Perkins Coie LLP
1201 Third Avenue, Suite 4800
Seattle, WA 98101-3099
Phone: 206.359.8000
Fax: 206.359.9000

5. Defendants' argument that this case should be dismissed for failure to state a claim is denied. The question is whether the Washington policy is substantially similar to the Kentucky policy. It is apparent that there have been some changes and there are differences from the Kentucky policy. The question is whether these differences are significant such that the Plaintiff could prove a violation of the Eighth Amendment. The issues are complicated and present a significant challenge for the trial court to evaluate and make factual findings. The Court cannot rule as a matter of law that Plaintiff cannot prove any set of facts showing that the Washington policy is unconstitutional.

6. The Clerk shall send uncertified copies of this Order to counsel for the Plaintiff and Defendants.

DATED this 21 day of November, 2008.

Honorable Chris Wickham

Presented by:

PERKINS COIE LLP

By: Diane M. Meyers
Sherilyn Peterson, WSBA No. 11713
speterson@perkinscoie.com
Diane Meyers, WSBA No. 40729
DMeyers@perkinscoie.com
1201 Third Avenue, Suite 4800
Seattle, WA 98101-3099
Telephone: 206.359.8000
Facsimile: 206.359.9000

Attorneys for Plaintiff

Approved as to Form

SARA J OLSON, WSBA #33003
JOHN J. SAMSON, WSBA #22187
Attorneys for Defendants

Perkins Coie LLP
1201 Third Avenue, Suite 4800
Seattle, WA 98101-3099
Phone: 206.359.8000
Fax: 206.359.9000

APPENDIX D

☐ EXPEDITE
☑ No Hearing Set
☐ Hearing is Set:
Date:
Time:
The Honorable Chris Wickham

STATE OF WASHINGTON
THURSTON COUNTY SUPERIOR COURT

DAROLD R.J. STENSON, Plaintiff, v. ELDON VAIL; STEPHEN SINCLAIR; MARC STERN; CHERYL STRANGE; WASHINGTON STATE DEPARTMENT OF CORRECTIONS, and DOES 1-50 Defendants.	NO. 08-2-02080-8 ORDER DENYING PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION (PROPOSED)

THIS MATTER having come on pursuant to the Plaintiff's Motion for Preliminary Injunction; the State being represented by ROBERT M. MCKENNA, Attorney General and SARA J. OLSON and JOHN J. SAMSON, Assistant Attorneys General, and the Plaintiff being represented by SHERILYN PETERSON and ELIZABETH D. GAUKROGER, Perkins Coie, LLP; and the Court having reviewed the Motion, the Responses and replies thereto, and the files and records and being fully advised in the premises, now therefore, IT IS HEREBY ORDERED:

1. There are three criteria for preliminary injunctive relief as established in Tyler Pipe Indus., Inc. v. Dep't of Revenue, 96 Wn.2d 785, 638 P.2d 1213 (1982).

ATTORNEY GENERAL OF WASHINGTON
Corrections Division
PO Box 40116
Olympia, WA 98504-0116
(360) 586-1445

APPENDIX D

2. The Plaintiff has satisfied two elements—well grounded fear of invasion of a right and whether the opposing party's acts complained of will result in actual and substantial injury.

3. But Plaintiff must also show a likelihood of success on the merits. Plaintiff has not demonstrated a likelihood of success on the merits.

4. The Supreme Court recently reviewed a constitutional challenge to Kentucky's procedures for lethal injection as a method of execution. Baze v. Rees, ___ U.S. ___, 128 S. Ct. 1520, 170 L. Ed. 2d 420 (2008). The Supreme Court held that Kentucky's protocol for lethal injection was constitutional, and the Supreme Court also held that a state protocol that was substantially similar to the Kentucky protocol would not violate the Constitution.

5. This Court finds the Washington policy governing lethal injection, despite some differences from the Kentucky protocol, appears to be substantially similar to the Kentucky protocol. The Court further finds that in areas where the two state policies diverge, it is because the Washington policy is not as specific as the Kentucky policy, although the Washington policy may be, in implementation, quite similar to the Kentucky policy.

6. The Court further finds that, even to the extent the Washington policy and the Kentucky policy are not similar as written or actually implemented, it is not clear that the Supreme Court instructed all states to have lethal injection policies identical to Kentucky's protocol in order to satisfy the Constitution. The Supreme Court held that the prisoners cannot challenge a policy merely by showing the existence of slightly safer alternatives, since such a rule would turn the courts into boards of inquiry determining best practices for an execution. To establish a constitutional violation, the safer alternatives must be feasible, readily available, and substantially reduce the risk of unnecessary pain. Plaintiff has made no such showing.

7. Although the Court cannot find as a matter of law that Plaintiff has failed to state a claim for relief, the Court does find that a likelihood of success on such a claim is slight, and that

ATTORNEY GENERAL OF WASHINGTON
Corrections Division
PO Box 40116
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though the harm that could result from the execution is great, it does not outweigh the remoteness of success on the merits of the claim.

8. The Court further notes the judgment and sentence was entered in 1994, and the judgment and sentence became final in 1997. The strong policy in favor of closure and in carrying out sentences, and the fact that Plaintiff has received judicial review of his sentence in multiple cases all weigh against the grant of a preliminary injunction.

9. For these reasons, Plaintiff's Motion for Preliminary Injunction is DENIED.

10. The Court recognizes that the Plaintiff may want to seek immediate review of this decision and I want to facilitate review, and therefore direct counsel to propose findings and conclusions for me to enter on November 21, 2008 on the 9:00 AM motion calendar.

11. I hereby certify, pursuant to RAP 2.3(b)(4), that this decision involves a controlling question of law as to which there is a substantial ground for difference of opinion and that immediate review of the order may materially advance the ultimate termination of the litigation.

12. Pursuant to RAP 2.3(d)(2), this decision involves a significant question of law under the Constitutions of the State of Washington and the United States.

13. Pursuant to RAP 2.3(d)(2), this decision involves an issue of the public interest which should be determined by an appellate court.

14. The Clerk shall send uncertified copies of this Order to counsel for the Plaintiff and counsel for the Defendants.

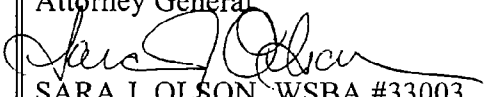
DATED this 21 day of November, 2008.

CHRIS WICKHAM
Judge, Thurston County Superior Court

ATTORNEY GENERAL OF WASHINGTON
Corrections Division
PO Box 40116
Olympia, WA 98504-0116
(360) 586-1445

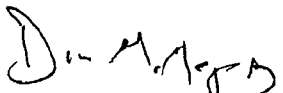
Presented by:

ROBERT M. MCKENNA
Attorney General



SARA J. OLSON, WSBA #33003
JOHN J. SAMSON, WSBA #22187
Assistant Attorneys General
Attorneys for Defendants

Approved as to form:



WSBA #40729

SHERILYN PETERSON
ELIZABETH D. GAUKROGER
Attorneys for Plaintiff

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Corrections Division
PO Box 40116
Olympia, WA 98504-0116
(360) 586-1445

APPENDIX E

JUDGE KENNETH WILLIAMS

ORIGINAL

SUPERIOR COURT OF WASHINGTON FOR CLALLAM COUNTY

DAROLD STENSON,

Petitioner,

vs.

STATE OF WASHINGTON,

Respondent.

NO. 93-1-00039-1

(~~PROPOSED~~) ORDER GRANTING PETITIONER'S MOTION FOR STAY OF EXECUTION

THE COURT having considered Darold Stenson's Motion for a Stay of Execution, and the records and files herein, the Court hereby

ORDERS a stay of execution.

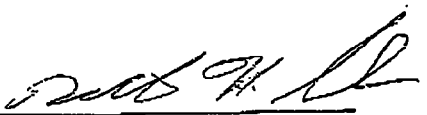
DONE this 25th day of November, 2008.

THE HONORABLE KENNETH WILLIAMS
CLALLAM COUNTY SUPERIOR COURT JUDGE

FEDERAL PUBLIC DEFENDER
1601 Fifth Avenue, Suite 700
Seattle, Washington 98101
(206) 553-1100

APPENDIX E

Presented by:



Robert H. Gombiner
WSBA # 16059
Attorney for Darold Stenson

FEDERAL PUBLIC DEFENDER
1601 Fifth Avenue, Suite 700
Seattle, Washington 98101
(206) 553-1100

APPENDIX F

MC 11/24

LOG I.D. NUMBER
0824742

STATE OF WASHINGTON
DEPARTMENT OF CORRECTIONS

LEVEL 1 – INITIAL GRIEVANCE
NIVEL 1 - QUEJA INICIAL

Name: Last / NOMBRE: APELLIDO	First / PRIMER NOMBRE	Middle / 2DO NOMBRE	DOC Number / NUMERO DOC	Facility/FACILIDAD	Unit/Cell / UNIDAD/CELDA
STENSON,	Darold		232018	WSP	IMU N

Community Corrections Office / OFICINA DE CORRECCIONES EN LA COMUNIDAD	Date Typed / FECHA ESCRITA	Remedy/REMEDIO	Resolution/RESOLUCION	Pending/PENDIENTE
	11/14/08	08	04	

PART A – INITIAL GRIEVANCE/ PARTE A – QUEJA INICIAL Response due/Respuesta requierida en 12/2/08

I WANT TO GRIEVE the DOC's policy and procedure for carrying out the penalty phase of my case. I believe that the State's current and alternative methods will cause me undue pain and suffering and are cruel and unusual punishment. Also, I do not have enough information to be able to make an informed choice between the available methods.

SUGGESTED REMEDY: Changes should be made in the State's mandated methods and procedures at WSP. [10/16/08]

C. Young 11/14/08

Grievance Coordinator Signature / FIRMA DE COORDINADOR DE QUEJAS — Date / FECHA

/s/ Darold Stenson 11/14/08

Grievant Signature / FIRMA DE QUEJANTE — Date / FECHA

PART B – LEVEL I RESPONSE / PARTE B RESPUESTA PRIMER NIVEL

Although your complaint was reconsidered and found to be a grievable issue, WSP doesn't have the authority to change DOC policy regarding this matter. Your suggested remedy can't be implemented at this level.

C. Young 11/17/08

Grievance Coordinator Signature / COOINADOR DE QUEJAS — Date / FECHA

You may appeal this response by submitting a written appeal to the coordinator within two (2) working days from date this response was received. Ud. Puede apelar esta respuesta al someter una apelación por escrito al coordinador dentro de dos (2) días de trabajo de la fecha en que esta respuesta fue recibida.

Distribution: White- Grievance Program Manager-Gerente del Programa de Quejas Green- Grievance Coordinator-Coordinador de Queja Canary- Grievant-Quejante Pink- Grievance Coordinator-Coordinador de Quejas Goldenrod- Grievant-Quejante

APPENDIX F

STENSON, Darold (#232018)/IMU-N (B05)

Grievance Log ID# 0824742

Although your complaint was reconsidered and found to be a grievable issue, WSP doesn't have the authority to change DOC policy regarding this matter. Your suggested remedy can't be implemented at this level.

LOG I.D. NUMBER
0824742

STATE OF WASHINGTON
DEPARTMENT OF CORRECTIONS

OFFENDER COMPLAINT

CHECK ONE: ☒ INITIAL GRIEVANCE, ☐ EMERGENCY GRIEVANCE, ☐ APPEAL TO NEXT LEVEL

RESIDENTIAL FACILITIES: Send all completed copies of this form to the Grievance Coordinator. Explain what happened, when, where, and who was involved or which policy/procedure is being grieved. Be as brief as possible but include the necessary facts. A formal grievance begins on the date the typed grievance forms are signed by the coordinator. Contact a staff member to report an emergency situation or to initiate an emergency grievance. Please attempt to resolve all complaints through appropriate staff before initiating a grievance.

NAME: LAST	FIRST	MIDDLE	DOC NUMBER
STENSON	DAROLD	R.J.	232018

PROGRAM ASSIGNMENT	WORK HOURS	FACILITY/OFFICE	UNIT/CELL
none Assigned	none	W.S.P.	S.H.U. H-10

[redacted]

I WANT TO GRIEVE: The DOC's policy and procedures for carrying out the penalty phase of my case. I believe that the State's current and alternative methods will cause me undue pain and suffering and are cruel and unusual punishment. Also, I do not have enough information to be able to make an informed choice between the available methods.

SUGGESTED REMEDY: changes should be made in the states mandated methods and procedures at W.S.P.

MANDATORY SIGNATURE: Darold R.J. Stenson DATE: 10-16-08

GRIEVANCE COORDINATOR'S RESPONSE

LOCATION CODE: WSP-E05 DATE RECEIVED: 10-20-08

Your complaint is being returned because:

☒ It is not a grievable issue.
☐ You requested to withdraw the complaint.
☐ You failed to respond to callout sheet on ______
☒ The formal grievance/appeal paperwork is being prepared.

☐ The complaint was resolved informally.
☐ Additional information and/or rewriting is needed. (See below.) Return within five (5) days or by: Due Date: ______
☐ No rewrite received. Date: ______

11/14/08

EXPLANATION: This isn't a grievable issue, per policy, because you are able to seek relief through the court system. However, you may request information regarding your sentence through your counselor

TYPE	CATEGORY	AREA	SPEC	REMEDY	RESOLUTION	DATE OF RESPONSE	COORDINATOR'S SIGNATURE
01	02	010	688	08	08	10/21/08	L. Young
				08	09	11/14/08	L. Young

Distribution: WHITE-Grievance Program Manager CANARY-Grievance Coordinator PINK-Grievant
DOC 05-165 (Rev. 2/05/07) DOC 550.100

* This will be accepted per the Grievance Program Manager.

rec 10/21

LOG I.D. NUMBER 0824772

STATE OF WASHINGTON
DEPARTMENT OF CORRECTIONS

OFFENDER COMPLAINT

CHECK ONE: ☐ INITIAL GRIEVANCE, ☐ EMERGENCY GRIEVANCE, ☒ APPEAL TO NEXT LEVEL

RESIDENTIAL FACILITIES: Send all completed copies of this form to the Grievance Coordinator. Explain what happened, when, where, and who was involved or which policy/procedure is being grieved. Be as brief as possible but include the necessary facts. A formal grievance begins on the date the typed grievance forms are signed by the coordinator. Contact a staff member to report an emergency situation or to initiate an emergency grievance. Please attempt to resolve all complaints through appropriate staff before initiating a grievance.

NAME: LAST	FIRST	MIDDLE	DOC NUMBER
STENSON	DAROLD	R.J.	832013
PROGRAM ASSIGNMENT	WORK HOURS	FACILITY/OFFICE	UNIT/CELL
[illegible]	[illegible]	W.S.P.	IMU B-5

COMMUNITY SUPERVISION: Send all completed copies of this form directly to: Grievance Program Specialist, Offender Grievance Program, Department of Corrections, P.O. Box 41129, Olympia WA 98504-1129

MAILING ADDRESS: STREET OR P.O. BOX / CITY / STATE / ZIP CODE / TELEPHONE NUMBER

I WANT TO GRIEVE: the response that I received on my grievance as being a non-grievable issue.

SUGGESTED REMEDY: the same as was suggested on my initial grievance.

MANDATORY SIGNATURE: Darold R.J. Stenson DATE: 10-28-08

GRIEVANCE COORDINATOR'S RESPONSE

LOCATION CODE: WSP-E04 DATE RECEIVED: 10/29/08

Your complaint is being returned because:
- ☒ It is not a grievable issue.
- ☐ You requested to withdraw the complaint.
- ☐ You failed to respond to callout sheet on ______
- ☒ The formal grievance/appeal paperwork is being prepared.
- ☐ The complaint was resolved informally.
- ☐ Additional information and/or rewriting is needed. (See below.) Return within five (5) days or by: ______
- Due Date: ______
- ☐ No rewrite received. Date: ______

EXPLANATION: Findings of non-grievability are not grievable or appealable because they are automatically reviewed by the Grievance Program Manager in Olympia.

INITIAL COMPLAINTS INFORMATION

TYPE	CATEGORY	AREA	SPEC	REMEDY	RESOLUTION	DATE OF RESPONSE	COORDINATOR'S SIGNATURE
				08	08	10/31/08	L. Young
				08	09	11/14/08	L. Young

Distribution: WHITE-Grievance Program Manager CANARY-Grievance Coordinator PINK-Grievant
DOC 05-165 (Rev. 2/05/07) DOC 550.100

* This will be accepted per the Grievance Program Manager.

APPENDIX G

DECLARATION OF DEVON SCHRUM

I, DEVON SCHRUM, make the following declaration:

1. I am the Grievance Program Manager for the Washington State Department of Corrections (DOC), located in Tumwater, Washington. My official duties include responding to questions regarding the inmate grievance program statewide, reviewing grievances appealed to Level III, reporting to courts and DOC officials on the status of the grievance program, and other duties related to this program. I have held this position since April, 2006.

2. The Washington Offender Grievance Program (OGP) has been in existence since the early 1980's and was implemented on a department-wide basis in 1985.

3. Under the OGP, an offender may file a grievance over a wide range of aspects of his/her incarceration. Inmates may file grievances challenging 1) DOC institution policies, rules and procedures; 2) the application of such policies, rules and procedures; 3) the lack of policies, rules or procedures that directly affect the living conditions of the offender; 4) the actions of staff and volunteers; 5) the actions of other offenders; 6) retaliation by staff for filing grievances; and 7) physical plant conditions. An offender may not file a grievance challenging 1) state or federal law; 2) court actions and decisions; 3) Indeterminate Sentence Review Board actions and decisions; 4) administrative segregation placement or retention; 5) classification/unit team decisions; 6) transfers; 7) disciplinary actions; and several other aspects of incarceration.

4. The OGP provides a wide range of remedies available to inmates. These remedies are outlined in OGP 015 and include 1) restitution of property or funds; 2) correction of records; 3) administrative actions; 4) agreement by department officials to remedy an objectionable condition within a reasonable time; and 5) a change in a local or department policy or procedure.

5. The grievance procedure consists of four levels of review:

Level 0 - Complaint or informal level. The grievance coordinator at the prison receives a written complaint from an offender on an issue about which the offender wishes to pursue a formal grievance. At this complaint level, the grievance coordinator pursues informal resolution, returns the complaint to the offender for rewriting, returns the complaint to the offender requesting additional information, or accepts the complaint and processes it as a formal grievance. Routine and emergency complaints accepted as formal grievances begin at Level I, complaints alleging staff misconduct are initiated at Level II.

Level I - Grievances against policy, procedure, or other offenders, and grievances processed as emergencies. The local grievance coordinator is the respondent at this level.

Level II - Appeal. Offenders may appeal Level I grievances to this level. Staff conduct grievances are initiated at this level. All appeals and initial grievances received at Level II are investigated, with the prison superintendent being the respondent.

Level III - Appeal. Offenders may appeal all Level II responses except emergency grievances to Department headquarters in Tumwater, where they are reinvestigated. Administrators are the respondents.

6. At this time, the offender has 20 working days from the date of the incident to file a grievance. An exception to this filing timeframe is allowed if there is a valid reason for the delay.

7. Darold Stenson, DOC #232018, is a DOC inmate currently incarcerated at the Washington State Penitentiary in Walla Walla, Washington.

8. The DOC's grievance system is well known to inmates; currently over 20,000 grievances are filed per year system wide. Mr. Stenson is well aware of the grievance system in the DOC as he has filed multiple grievances during his incarceration, some of which have been appealed.

9. It is my understanding that Mr. Stenson's complaint contains an allegation that DOC Policy 490.200 is unconstitutional. An offender may grieve DOC policy under the DOC's grievance system.

10. I have reviewed DOC's official grievance records concerning Mr. Stenson, and have determined that he did file a grievance regarding DOC Policy 490.200. Defendant's Response to Plaintiff's Motion for Temporary Restraining Order or Preliminary Injunction, Exhibit 6, Grievance Log ID #0824742. This grievance was originally rejected as ungrievable; however, that rejection was reconsidered. Mr. Stenson's grievance was accepted for review and responded to at Level I of the grievance process. Id. Mr. Stenson was notified of the Level I grievance response and notified of his opportunity to appeal to Level II on November 17, 2008. Id. Pursuant to policy, Mr. Stenson had two days to file an appeal to Level II. Mr. Stenson has not appealed the Level I grievance response. As such, Mr. Stenson has failed to exhaust his administrative remedies as to this policy and its application to him.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge.

EXECUTED this 24 day of November, 2008, at Tumwater, Washington.

DEVON SCHRUM

APPENDIX H

I, DELL-AUTUMN WITTEN, make the following declaration:

1. I am currently employed by the Washington State Department of Corrections (DOC) as a Program Specialist 5. As part of my job duties I am responsible for responding to requests for specific policies promulgated by the Department of Corrections.

2. A true and correct copy of the Department of Corrections Policy Directive 490.200, Capital Punishment, effective October 25, 2008, is attached to this Declaration as Attachment A. This is the current version of the policy.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge.

EXECUTED this 12th day of November, 2008, at Tumwater, Washington.

DELL-AUTUMN WITTEN

ATTACHMENT A

STATE OF WASHINGTON DEPARTMENT OF CORRECTIONS	APPLICABILITY **PRISON**		
	REVISION DATE 10/25/08	PAGE NUMBER 1 of 12	NUMBER **DOC 490.200**
POLICY	TITLE **CAPITAL PUNISHMENT**		

REVIEW/REVISION HISTORY:

Effective: 9/3/93
Revised: 6/15/98
Revised: 8/10/01
Revised: 6/21/07
Revised: 10/25/08

SUMMARY OF REVISION/REVIEW:

Title and Team Name changes throughout
I.A.1., II.C. & VIII.A.1., & VIII.C.2. – Added clarifying language
III.B.3. – Added requirements for ISDP incoming mail
III.B.4.b. & 5.b. – Added clarifying language regarding attorney of record
Revised IV.A.1. to specify a single media event
Added IV.B.1. & DOC 21-575 Acknowledgment of Visitor Search Requirements for searches of media representatives
Revised V.F. regarding search requirement for witnesses
VI.C. – Revised housing requirements for female ISDP
VIII.A.2. – Added requirement for 3 practice sessions for lethal injections
VIII.B. – Removed medical file review; revised physical examination requirement
IX.A.1.d. – Added that Lethal Injection Team members must be trained; added qualifications
IX.A.2.a. – Changed Director of Health Services to Superintendent
IX.A.4.b. & d. – Revised requirements for lethal injection
IX.A.4.h. – Removed requirement that Lethal Injection Team remove apparatus and saline
X.A. – Calls to Headquarters will be made to the Department Emergency Operations Center
X.F. – Removed requirement that Death Certificate be signed before removal of body
Several changes to Attachment 1

APPROVED:

Signature on File

ELDON VAIL, Secretary
Department of Corrections

10/23/08
Date Signed

ATTACHMENT A

REFERENCES:

DOC 100.100 is hereby incorporated into this policy; RCW 10.95.160-190; WAC 137-48-050; DOC 410.040 Incident Command System (ICS)

POLICY:

I. The Department has established procedures governing capital punishment to meet the requirements of RCW 10.95.160-190. These procedures set forth:

A. Security requirements for an Inmate Subject to the Death Penalty (ISDP),
B. Protocol for conducting an execution,
C. The care provided the ISDP while a valid Death Warrant is in force, and
D. The method of execution by lethal injection or hanging.

II. The Department Secretary designates the Assistant Secretary for Prisons to coordinate:

A. The responsibilities of the Washington State Penitentiary (WSP) Superintendent, and

B. A review of the procedures and all operational decisions in carrying out the execution, as well as the legal status of the Death Warrant.

DIRECTIVE:

I. ISDP Housing

A. Upon receipt of an ISDP and prior to receipt of a Death Warrant:

1. Male ISDPs shall be housed in a single person cell located in a segregated area of WSP.

2. Female ISDPs shall be housed in a segregated area of the Washington Corrections Center for Women (WCCW). Prior to the execution date, the female ISDP will be transported to WSP for housing and execution.

II. Pre-Execution Procedure

A. Consistent with RCW 10.95.190, a log shall be maintained with the Death Warrant in the Superintendent's Office.

B. Responsibilities are listed in the Execution Procedures and Assignments Checklist (Attachment 1).

C. Only staff assigned by the Superintendent will attend the execution. No facility staff will be required to participate in any part of the execution procedure.

III. Notification to ISDP

A. After receiving confirmation of a valid Death Warrant, the Superintendent will designate an Associate Superintendent to personally interview the ISDP regarding procedures relating to the execution.

B. The Associate Superintendent will provide the ISDP with a written summary of procedures, to include mail, visits, telephone usage, and available religious services. The ISDP will be informed of the following:

1. The date of the execution.

2. The punishment of death shall be by lethal injection.

   a. The ISDP may elect hanging as an alternate means of execution.

   b. The procedure to be used will be determined 14 days prior to the execution and the method cannot be changed after that date. If the ISDP elects hanging, it must be stated in writing no later than 14 days prior to the execution date.

3. Mail procedures for an ISDP with an active Death Warrant will be as follows:

   a. The Mail Room Sergeant will be instructed, in writing, to forward all incoming mail, unopened, to the designated Associate Superintendent, who will screen and exclude any items which may threaten the order and security of the facility with regard to the ISDP.

      1) Mail intended to harass the ISDP will be considered a threat to the orderly operation of the facility and restricted per WAC 137-48-050.

      2) Legal mail will be screened, not read.

   b. The Mail Room Sergeant will maintain a log of all incoming and outgoing mail, noting the date and time of receipt and delivery. A separate log will be maintained for all legal mail.

4. All visits between the ISDP and authorized visitors will be no contact.

a. Visitation for an ISDP will be consistent with the visiting procedures of other offenders housed in the Intensive Management Unit (IMU).

b. Seven days prior to the execution, daily visits will be authorized in addition to visits with the attorney of record.

c. Twenty-four hours prior to the execution date, all visits and visitors require the approval/denial of the Superintendent.

d. After the ISDP is moved to the execution holding cell, visits will be restricted to approved clergy and the attorney of record.

5. The ISDP will have unlimited phone access during the daily yard period. Fourteen days prior to the execution date, an additional daily one hour yard will be provided.

a. There will be no limit on the number or duration of calls to and from the attorney of record.

b. Only calls from the attorney of record will be authorized following transfer to the execution holding cell.

IV. Media Relations

A. The Superintendent/designee will coordinate all requests for information concerning an execution.

1. A single event to provide representatives of major and local media an opportunity to access the chamber will be authorized by the Superintendent and coordinated by designated staff.

B. The Superintendent will establish procedures for selecting media witnesses as specified in the Witness Selection section of this policy.

1. No audio/electronic/video equipment, cameras, telephones, or recording/ communication devices will be permitted in the chamber. Media witnesses will be subject to an electronic and pat search. Written consent for search will be required using DOC 21-575 Acknowledgment of Visitor Search Requirements.

2. The only items that are allowed in the chamber are pens, pencils, and writing tablets supplied by the facility.

C. Requests from media representatives for access to the Information Center must be submitted in writing.

1. Information Center access will not be permitted more than 3 hours prior to an execution.

D. Media access to a designated area of the facility parking lot will be permitted at a designated time the day prior to the execution.

E. Media will not be permitted to film or conduct interviews with facility staff without the prior authorization of the Superintendent/designee.

F. All normal facility security procedures will apply. Failure to comply with these procedures, Department policies, operational memorandums, or directions from authorized personnel may be cause for removal from the facility and/or facility grounds. The Superintendent may establish emergency rules and procedures.

V. Witness Selection

A. Not less than 20 days prior to an execution, individuals who wish to attend and witness the execution must submit a letter of request (e.g., application) to the Superintendent. The letter must designate the relationship to the ISDP and reason(s) for wishing to attend. Eligible individuals include:

1. Judicial officers (i.e., the Judge who signed the Death Warrant for the ISDP, the current Prosecuting Attorney or a Deputy Prosecuting Attorney of the county from which the final Judgment and Sentence and Death Warrant were issued, and the most recent attorney of record representing the ISDP),

2. Law enforcement representatives (i.e., officers responsible for investigating the crime for which the inmate was sentenced to death),

3. Media representatives,

4. Representatives of the families of the victims (i.e., immediate family or victim advocates of the immediate family), and

5. Representatives from the ISDP's immediate family.

B. Not less than 15 days prior to the execution, the Superintendent shall determine the total number of individuals, other than Department employees, who will be allowed to attend and witness the execution.

1. The Superintendent shall determine the number of witnesses allowed in each category of eligible individuals.

a. No less than 5 media representatives will be included, with consideration given to news organizations serving communities affected by the crimes or the execution.

b. Up to 2 law enforcement representatives will be included. The chief law enforcement officer of the jurisdiction where the crime was committed shall designate the law enforcement representatives.

2. Once the list is composed, the Superintendent shall serve the list on all parties who have submitted a letter (e.g., application) to witness the execution.

C. Not less than 10 days prior to the execution, the Superintendent shall file the witness list with the Superior Court from which the conviction and Death Warrant were issued. The witness list will be filed with a petition asking that the court enter an order certifying the list as a final order identifying the witnesses to attend the execution. The final order of the court certifying the witness list shall not be entered less than 5 days after the filing of the petition.

D. Unless a show cause petition is filed with the Superior Court from which the conviction and Death Warrant were issued within 5 days of the filing of the Superintendent's petition, the Superintendent's list, by order of the Superior Court, will become final and no other party will have standing to challenge its appropriateness.

E. In no case may the Superintendent or the Superior Court order or allow more than 17 witnesses to a planned execution, excluding required staff.

F. All witnesses must adhere to the facility's search and security provisions in regards to witnessing an execution and may be subject to emergency rules and procedures. Written consent for search will be required using DOC 21-575 Acknowledgment of Visitor Search Requirements.

VI. Execution Holding Cell

A. Prior to the execution, but no sooner than 24 hours before, the ISDP will be moved to the execution holding cell.

B. The holding cell will contain:

1. Bedding that includes a mattress, 2 sheets, 3 blankets, a pillow, and a pillow case,

2. Personal hygiene items that include 2 towels, a washcloth, and a bar of soap,

3. Approved personal items and clothing that include underwear, facility clothing, legal materials, religious items, jewelry, or other personal items as requested by the ISDP and approved by the Superintendent, and

4. Other personal items as requested by the ISDP and approved by the Superintendent to be retained by holding cell staff and issued as requested by the ISDP.

C. A female ISDP may be housed in the WSP Intensive Management Unit (IMU) prior to being moved to the execution holding cell.

D. Two correctional staff will be posted at the holding cell at all times and a complete log of activities will be maintained.

VII. Final Meal

A. At the meal period just prior to the time of execution, the ISDP will be allowed to provide his/her meal selection from a menu prepared and provided by the Food Service Manager. The Food Service Manager will ensure preparation and delivery of the meal to the ISDP.

VIII. Execution Preparation

A. The Superintendent will appoint individuals to support the execution process.

1. No staff will be required to participate in any part of the execution procedure.

2. Briefings and rehearsals will be conducted as necessary to ensure adequate preparation for the execution. For an execution by lethal injection, there shall be a minimum of 3 practice sessions preceding an execution that shall include the siting of intravenous (IV) lines.

B. Medical Review

1. A physical examination of the ISDP may be conducted to determine any special problems (e.g., collapsed veins, obesity, deterioration of bone or muscular structure) that may affect the execution process. The ISDP's height and weight will be measured during the examination.

2. Based upon the physical examination, the Superintendent may consult with appropriate experts to determine whether deviation from the policy is advisable to ensure a swift and humane death.

C. Crowd Control

1. The Superintendent will notify law enforcement agencies of the date of execution, enabling them to prepare for any traffic and crowd control issues that may arise.

2. Prior to the execution, the Superintendent will hold briefings for local and state law enforcement agencies to determine the manner and extent to which WSP and Department resources will support law enforcement in managing crowd control and potential external threats.

3. An area(s) will be designated for the general public.

4. The WSP Emergency Response Team (ERT) will provide crowd control for the protection of the WSP grounds.

   a. The ERT Commander(s) will be briefed by the Superintendent prior to the execution.

   b. In the event that protesters and/or onlookers gather, law enforcement assistance will be requested to direct them to the designated area.

IX. Execution Procedure

A. Lethal Injection

1. Lethal Injection Materials/Personnel

   a. All tubing, syringes, saline solution, and other apparatus will be on site and verified no later than 7 days prior to the execution.

   b. The Superintendent will direct the acquisition of the appropriate quantities of lethal substances. These will be available and on site 7 days prior to the execution date.

   c. The Superintendent will ensure the security and continued verification of all materials.

   d. Lethal Injection Team members will have sufficient training or experience to carry out the lethal injection process without any unnecessary pain to the ISDP. Minimum qualifications include one or more years of professional experience as a certified Medical Assistant, Phlebotomist, Emergency Medical Technician, Paramedic, military corpsman, or similar occupation.

2. Lethal Injection Table

a. The Superintendent, in conjunction with the Plant Manager, will examine and verify that the lethal injection table is in working order with all restraints available.

3. Preparation of the Execution Area

a. The Lethal Injection Team will inspect the area designated for lethal injection and make any final recommendations to the Superintendent.

b. The Lethal Injection Team will assemble all necessary materials for transport to the chamber no less than one hour prior to the time of execution. The Lethal Injection Team Leader will secure the lethal substances and personally transport them to the chamber.

c. The solutions for injection will be prepared not more than 30 minutes prior to administration.

4. Execution Process

a. The Superintendent will direct that the ISDP be brought to the chamber. The Escort Team will place the ISDP on the lethal injection table and appropriately secure the ISDP to the table. The Escort Team will then leave the room.

b. The Lethal Injection Team will establish 2 IV lines and start a normal flow of saline through each line. The Lethal Injection Team will ensure that a slow, normal saline flow is maintained through each line.

c. The Superintendent will ask the ISDP if s/he has any last words.

d. Upon notification from the Superintendent, the Lethal Injection Team will introduce the following lethal solutions using a bolus injection into the tubing in the order specified:

1) 3 g thiopental sodium
2) 50 cc normal saline
3) 100 mg pancuronium bromide
4) 50 cc normal saline
5) 240 mEq potassium chloride (KCl)

e. Either line may be used for injection of solutions as required. The Superintendent shall observe the ISDP for signs of consciousness before the Lethal Injection Team administers the pancuronium

bromide. If the Superintendent observes that the ISDP is conscious following the first dose of thiopental sodium, s/he shall direct the Lethal Injection Team to administer an additional 3 g dose of thiopental sodium.

f. The Lethal Injection Team Leader will signal the Superintendent when all of the solutions have been administered.

g. At a time deemed appropriate by the Superintendent, the curtains will be closed. The Superintendent will call for the physician to examine the body and make a pronouncement of death.

h. After the pronouncement of death, the Lethal Injection Team will remain in the area until directed to leave.

i. Post-execution procedures will be followed.

B. Hanging

1. The gallows area trap door(s) and release mechanisms will be inspected for proper operation.

2. A determination of the proper amount of drop of the ISDP through the trap door will be made. The following standard military execution drop chart will be used:

WEIGHT (Pounds)	DROP DISTANCE
120	8'1"
125	7'10"
130	7'7"
135	7'4"
140	7'1"
145	6'9"
150	6'7"
155	6'6"
160	6'4"
165	6'2"
170	6'0"
175	5'11"
180	5'9"
185	5'7"
190	5'6"
195	5'5"

200	5'4"
205	5'2"
210	5'1"
220 and over	5'0"

3. Equipment

   a. Hood – The hood will be a neutral color with an outer surface made of rough material, split at the open end so that it will come down over the chest and back.

   b. Collapse Board – A board will be provided for use in case the ISDP collapses.

   c. Restraints – Restraints will be used to ensure that the hands and arms of the ISDP are securely held to his/her front and sides.

   d. Rope –The rope will be manila hemp, at least ¾ inch and not more than 1¼ inches in diameter and approximately 30 feet in length. The rope will be soaked and then stretched while drying to eliminate any spring, stiffness, or tendency to coil. The knot will be treated with wax, soap, or clear oils ensuring a smooth sliding action through the knot. The knot will be tied according to Army regulations.

4. Execution Process

   a. Restraints will be placed on the ISDP by assigned staff.

   b. The Escort Team will escort the ISDP to the gallows area. The ISDP will be placed, standing, in the spot designated by the Superintendent. The Superintendent will ask the ISDP if s/he has any last words.

   c. The hood will be placed on the ISDP and leg restraints applied. If a collapse board appears to be necessary, the Escort Team will put the board in place.

   d. The noose will be placed snugly around the ISDP's neck in such a manner that the knot is directly behind the left ear.

   e. The Superintendent will direct the trapdoor be released.

   f. The Escort Team will move to the lower floor location to assist with removal of the deceased ISDP. The curtains will be closed.

g. At a time deemed appropriate by the Superintendent, the physician will be called to make a pronouncement of death.

X. Post-Execution Procedure

A. The Assistant Secretary for Prisons will notify the Secretary and Incident Command Center of the time of death. Necessary calls to Headquarters will be made to the Department Emergency Operations Center.

B. The Superintendent will inform a designated staff of the time of death, who will then inform the witnesses.

C. The witnesses will be escorted out of the execution area immediately after the pronouncement of death.

D. The media witnesses will be escorted to the Information Center.

E. The Chaplain will provide official notification to the family of the time of death.

F. The body will be removed from the facility by a pre-determined route.

G. A post-trauma specialist and the Chaplain will be available to staff preceding, during, and after the execution. Staff will also be provided a confidential list of off-site locations where counseling and/or spiritual support will be available.

H. Within 20 days after the execution, the Superintendent shall return the Death Warrant to the clerk of the trial court from which it was issued, along with the log identified in the Pre-Execution Procedure section of this policy.

DEFINITIONS:

Words/terms appearing in this policy may be defined in the glossary section of the Policy Manual.

ATTACHMENTS:

Execution Procedures and Assignments Checklist (Attachment 1)

DOC FORMS:

DOC 21-575 Acknowledgment of Visitor Search Requirements

DEPARTMENT OF CORRECTIONS
WASHINGTON STATE PENITENTIARY
EXECUTION PROCEDURES AND ASSIGNMENTS CHECKLIST

Inmate:

Date of Execution:

DATE COMPLETED/ STAFF INITIALS	TASK	ASSIGNED PERSONNEL
Compliance Date: Approximately 30 days prior to the scheduled execution		
	Superintendent appoints an Execution Incident Commander.	
	Execution Incident Commander determines the Incident Command System (ICS) objectives, strategies, tactical direction, and organizational structure needed for the execution event and identifies planning elements required.	
	Execution Incident Commander develops a draft Incident Action Plan (IAP) for the execution and submits to the Superintendent for approval. The IAP will contain, at a minimum, all elements identified in this checklist.	
	ISDP is informed of the statutory requirements regarding the method of execution and is advised the Superintendent will request s/he submit his/her election of alternate method in writing.	
	ISDP is given opportunity to designate family members as witnesses.	
	ISDP has been provided a written summary of the procedures governing mail, visitation, telephone use, and available religious services.	
	Mail Room Supervisor is informed, in writing, of the ISDP's name and execution and instructed that: ☐ All incoming mail addressed to ISDP will be forwarded unopened to a designated Associate Superintendent ☐ A log will be maintained of all incoming/outgoing mail noting date and time of receipt and distribution ☐ A separate log will be maintained for legal mail	

DATE COMPLETED/ STAFF INITIALS	TASK	ASSIGNED PERSONNEL
	The facility Public Information Officer has been informed of scheduled date and directed to prepare a media plan.	
	The Intensive Management Unit (IMU) Manager has been informed of mail, visit, telephone use, and available religious services as they apply to the ISDP.	
	ISDP is placed on 30 minute check. Observed behavior is entered in designated log.	
	Chaplain is assigned as Religious Specialist and briefed.	
	Sources and procedures for acquiring the substances necessary for lethal injection have been investigated. Plans being made for acquiring all necessary equipment essential to carry out either mode of execution.	
	Coordination meeting with local law enforcement is scheduled.	
	Lethal Injection Team or Hanging Team, as necessary, is identified and notified.	
	Individuals eligible to witness execution are identified. Appropriate letters sent.	
Compliance Date: Not less than 20 days prior to the execution		
	Superintendent completes changes to IAP and returns to the Execution Incident Commander.	
	Staff assigned an organizational role within the ICS structure are identified and briefed.	
	ICS organization completes identified planning elements, required forms, and documentation for the IAP.	
	Letters received from potential witnesses have been processed.	

DATE COMPLETED/ STAFF INITIALS	TASK	ASSIGNED PERSONNEL
	The chamber has been inspected to ensure the following systems are functional: ☐ Plumbing ☐ Lighting ☐ Emergency Lighting ☐ Mechanical Systems ☐ Locking Systems ☐ Telephones ☐ Sanitation ☐ Furnishings ☐ Toilet Facilities	
	Execution Incident Commander ensures all staff assigned to positions within the chamber receive a briefing and notification of the date and time of "on-site" rehearsal.	
	Execution Incident Commander ensures a written report detailing the condition of the chamber has been submitted to the Superintendent citing any deficiencies. A schedule of corrective actions will be provided.	
Compliance Date: 15 days prior to the execution		
	All changes, improvements, or renovations to the chamber have been completed.	
	Total number of individuals to attend/witness the execution, other than staff, has been identified.	
	Witness applicants have been notified of the final witness list.	
Compliance Date: 14 days prior to execution		
	ISDP is authorized one additional hour of yard time each day.	
	ISDP is provided final opportunity to choose alternate method of execution.	
	All equipment has been procured for either mode of execution.	
	Notification to staff/ISDP for program changes if needed (e.g., visiting, etc.).	
	Arrangements made to ensure Death Certificate will be available. Superintendent is advised.	
Compliance Date: Not less than 10 days prior to the execution		

DATE COMPLETED/ STAFF INITIALS	TASK	ASSIGNED PERSONNEL
	List of authorized witnesses is filed with Superior Court in county of conviction from which Death Warrant issued.	
	Physical examination is conducted, if needed.	
	The following have been checked: ☐ All equipment required for lethal injection ☐ All equipment required for hanging, if necessary.	
	Conduct at least 3 lethal injection practice sessions, if necessary, including siting of IV lines.	
	Gallows area trap door(s) and release mechanisms are inspected for proper operation, if necessary.	
	Proper amount of drop of ISDP through the trap door is determined, if necessary.	
	IAP specifically details crowd control strategies and tactics and identifies the operational supervisor/leader.	
Compliance Date: 7 days prior to the execution		
	Execution Incident Commander submits final IAP to the Superintendent and receives signature approval.	
	ISDP is authorized daily visits (in addition to with attorney of record).	
	Instructions are provided to staff on entrance and egress routes.	
	Mobile restroom facilities are placed in the designated demonstration area.	
	Post-execution handling of ISDP is coordinated.	
	Lethal solutions, if required, have been obtained and placed in security lock box.	
	The specific route and mode of body removal is determined and information transmitted to: ☐ Superintendent ☐ Execution Incident Commander ☐ Captain ☐ Shift Commander ☐ Washington State Patrol	
	Menu for final meal is prepared and presented to Superintendent for approval.	
Compliance Date: Approximately 5 days prior to the execution		

DATE COMPLETED/ STAFF INITIALS	TASK	ASSIGNED PERSONNEL
	On-site rehearsal has been conducted with all Execution Event staff participating.	
	The holding cell area has been inspected and is ready for occupancy.	
	Security inspections of the entire chamber have been conducted.	
	The holding cell is prepared and equipped with: ☐ 1 Mattress ☐ 2 Sheets ☐ 3 Blankets ☐ 1 Pillow ☐ 1 Pillowcase ☐ 2 Towels ☐ 1 Washcloth ☐ 1 Bar of Soap	
	Chamber and all systems have been checked for operation and readiness. All equipment present and functional.	
	Notices are issued to any contract/volunteer staff and/or construction workers of planned suspension of their activities.	
	Arrangements for Death Certificate are confirmed and communicated to the Superintendent/Execution Incident Commander.	
Compliance Date: Approximately 4 days prior to the execution		
	Coordination briefings with local law enforcement agencies have been conducted.	
	All staff assignments made: ☐ Chamber Security Team ☐ Correctional Program Managers ☐ Captain ☐ Chamber Media Escort Team ☐ Visiting Room Media Monitor ☐ Chaplain ☐ Transport/Restraining Team ☐ Holding Cell Security Team ☐ Health Care Manager 2 ☐ Incident Command Post Staff (Security/Communication) ☐ Specialty Team Group Supervisor/ERT Leader ☐ Specialty Team Group Supervisor/SERT Leader	

DATE COMPLETED/ STAFF INITIALS	TASK	ASSIGNED PERSONNEL
	Staff escorts assigned for all non-WSP individuals attending.	
Compliance Date: 24 hours prior to execution		
	Superintendent approves all visitors.	
	ISDP is requested to designate disposition of his/her property/remains in writing.	
	A thorough security inspection of the entire chamber area, including search of cells, has been conducted.	
	Clocks are coordinated.	
	ISDP is moved from IMU to holding cell. Visitors limited to approved clergy and attorney of record.	
	Upon arrival at the holding cell, ISDP is informed of conditions of confinement.	
	The IAP is initiated and Incident Command Post opened and staffed.	
	Main facility is briefed at roll call of extraordinary security measures.	
	A designated staff to operate PBX reports for work.	
Execution Day		
	Chamber Access Security Team (Shift A) reports to duty station in chamber.	
	Cell Security Team (Shift A) reports to duty station in chamber.	
	Lethal solutions, if needed, are transferred to the injection room in the chamber.	
	Final meal is prepared and served to ISDP.	
	Chamber Access Security Team Shift B relieves Shift A.	
	Cell Security Team Shift B relieves Shift A.	
	Authorized media representatives are allowed access to the facility and are briefed by the Superintendent/designee.	
	All witnesses have been assigned escorts and allowed access to the facility.	
	All traffic through information desk area, visitor tunnel is cleared.	
	All staff designated as participants are at duty stations in the chamber.	

DATE COMPLETED/ STAFF INITIALS	TASK	ASSIGNED PERSONNEL
	Department Secretary has been contacted by telephone from the Incident Command Post/Communications Center and an open line from the Department Emergency Operations Center to the chamber is established.	
	Incident Command Post/Communications Center contacts the Attorney General's Office by telephone and maintains an open line.	
	Lethal Injection Team enters and the equipment for injection mode and back-up equipment is tested, if necessary.	
	Hanging Team enters the gallows area and the equipment and back-up equipment is tested, if necessary.	
	Open line participants verify and concur no stay has been received. The time is _____ or later and the execution is to proceed.	
	Superintendent is in place in chamber.	
	ISDP is placed in restraints and escorted to the appropriate execution area.	
	All pre-execution preparations are completed. All participants are in place.	
	Assistant Secretary confirms that no stays have been granted.	
	Assistant Secretary informs Superintendent that there are no stays.	
	Superintendent signals the execution to proceed.	

APPENDIX I

DECLARATION OF STEPHEN D. SINCLAIR

I, STEPHEN D. SINCLAIR, make the following declaration:

1. I am currently employed as the Superintendent of the Washington State Penitentiary (WSP). I have been employed in this position for 2 months. Prior to assuming the position of Superintendent, I was employed as an Associate Superintendent at WSP for 3 years. I have worked for the Department of Corrections (DOC) for 20 years. Prior to my employment by DOC, I was an infantryman in the United States Army and stationed at various posts in and out of the country. During my enlistment I received training and certification as a Combat Life Saver and completed a course for Emergency Medical Technicians presented by Pikes Peak Community College in Colorado Springs, Colorado. In previous executions carried out at the Washington State Penitentiary I have participated in the transportation of the Inmate Sentenced to Death Penalty (ISDP) to the chamber holding cell and other security/escort functions.

2. As the Superintendent for WSP, I am personally and thoroughly familiar with DOC Policy 490.200, Capital Punishment. I am familiar with my responsibilities as well as the responsibilities of the Lethal Injection Team and the Escort Team.

3. Darold Stenson is an ISDP and is scheduled for execution on December 3, 2008. I have reviewed Mr. Stenson's medical records and know that his weight fluctuates between 230 and 233 pounds and that his veins have been examined and are considered "normal" in that there are no signs of collapsed veins. Additionally, Mr. Stenson does not have a history of intravenous (IV) drug use.

4. I am personally aware of the identities of all members of the Lethal Injection Team and the Escort Team and of their qualifications, training, and professional experience.

5. Each member of the Lethal Injection Team has sufficient training or experience to carry out the lethal injection process without any unnecessary pain to Mr. Stenson. All members of the Lethal Injection Team each have one or more year of professional experience as a certified Medical Assistant, Phlebotomist, Emergency Medical Technician, Paramedic, military corpsman, or similar occupation, as required by DOC Policy 490.200, Directive IX(A)(1)(d).

Additionally, the member of the Lethal Injection Team who will insert the IV lines regularly inserts IV lines as a part of his/her professional duties.

6. Pursuant to the requirements of DOC Policy 490.200, Directive VIII(1)(2) practice sessions have been conducted at WSP in anticipation of Mr. Stenson's scheduled execution.

7. The Lethal Injection team members have conducted three full lethal injection practice sessions since October 6, 2008. Each of these sessions involved a full walk-through of the entire lethal injection process and the insertion of IV lines in both arms of the person acting as the ISDP. I have personally acted in the role of the ISDP for two of these sessions and experienced the entire process to include the insertion of the needle and IV lines on both arms.

8. The lethal injection process includes the escorting in of the ISDP, the placing of the ISDP on the table, the securing of the ISDP to the table, and the insertion of the IV lines. There is 174" of tubing from the saline drip bag in the injection room to the arm of the ISDP in the execution chamber. Once the ISDP has been secured to the table and the IV lines have been inserted in both arms, with saline flowing through the IV lines, the members of the Lethal Injection Team enter and remain in the injection room. This room is approximately two feet from the head of the table to which the ISDP is secured. The injection room has a 9" by 7" door which is opened to the execution chamber to provide for direct, unobstructed, visual communication between myself and the Lethal Injection Team members. Once the Lethal Injection Team members have gone into the injection room, the witnesses are escorted into the witness room. Once the witnesses are seated, the curtain is opened. The witnesses sit six feet from the execution chamber window and have direct visual access to the execution chamber, me, and the ISDP. Once the witnesses have been brought in, the ISDP is permitted to give last words. I then orally communicate with the Deputy Secretary that there are no further stays. Once the Deputy Secretary has confirmed there are no further stays, I give a visual signal to the Lethal Injection Team to begin injection of the 3 grams of thiopental sodium. I observe the ISDP for signs of consciousness after the injection of the thiopental sodium. If any are seen, I instruct

the Lethal Injection Team to insert a second 3 gram dose of thiopental sodium. Once no signs of consciousness are observed, I signal to the Lethal Injection Team to inject the 50 cc normal saline, 100 mg pancronium bromide, 50 cc normal saline, and 240 mEq potassium chloride in succession. Throughout the injection of the drugs I am no more than one foot from the ISDP seated immediately next to his right arm. The execution chamber and the injection room are well lit and provide for clear sight and ample space for the movement of all staff participating in the execution.

9. I have received training on how to insert an IV line so that I am familiar with the process and how it is done effectively, although I will not be the individual inserting the IV lines during Mr. Stenson's execution.

10. I have also received personal, particularized training on recognizing the signs of an IV line that has not been properly sited. In an execution, an IV needle is used to site the IV lines. The IV needle has a connector needle, which is a fine pointed needle, with a fine, plastic sheath around it, with the needle protruding approximately an inch, and an approximately 3-inch length of connector tubing attached to it. The connector needle is inserted into the vein. Once the connector needle enters the vein there is a "flash" of blood which enters the hub of the needle. The "flash" indicates that a vein has been entered. Once the connector needle has entered the vein, the sheath is pushed down into the vein and the connector needle is removed. A syringe is then attached to the connector tubing and a "pull back" of the syringe's plunger is done to see if blood enters the connector tubing, indicating a vein has been entered. Once it is determined that a vein has been entered, the syringe is removed and the connector tubing is attached to the IV tubing and the saline flow begins. If a vein is missed, the "flash" will not occur, the "pull back" will not work, and there will be swelling at the injection site once the saline begins to enter the subcutaneous muscle. I have received training in witnessing the "flash", the "pull back", and looking for swelling at the injection site.

11. In each of the three full practice sessions, there were no difficulties with the insertion of the IV lines. The sessions were conducted without error or incident.

12. Prior to the execution, if Mr. Stenson does not elect hanging, the lethal injection drugs will be obtained by the WSP pharmacy. Once they arrive at the institution, they will be brought from the pharmacy at WSP to my office where they will be secured in a locked box, to which I have the only key. On the day of the execution, the drugs will be taken from the locked box in my office and given to the Lethal Injection Team. The Lethal Injection Team will follow the directions on the thiopental sodium box and will mix the powdered drug with saline to make a liquid to be injected into the ISDP. Both the pancronium bromide and the potassium chloride come in liquid form.

13. The Escort Team members and I have conducted fifteen to twenty hanging practice sessions in the last three weeks. In each of these practice sessions, either a mannequin has been "dropped" through the trap door or a metal container with weights weighing 230 pounds (to simulate Mr. Stenson's body weight) has been "dropped" through the trap door. In each hanging practice session involving the mannequin, of which there have been at least ten, the individual who will be placing the noose around the ISDP's neck has practiced the placing and tightening of the noose. In order to ensure a swift, painless death, the noose is placed extremely tightly around the ISDP's neck with the noose directly behind the ISDP's left ear and the running part of the noose, i.e. the part that moves when the noose is tightened, placed along the front of the neck. Four different ropes have been "stretched" which includes wetting the rope and stretching it to eliminate any risk of recoil once the trapdoor has opened and the ISDP has fallen the five feet. In the practice sessions with the mannequin, after the noose has been securely placed, the trapdoor is opened and the mannequin falls through and the rope is extended to the full five feet. In each hanging practice session involving the metal crate containing weights totaling 230 pounds, of which there have been at least five, the metal crate has been placed on the trapdoor and the rope has been attached to the metal crate. When the trapdoor drops, the metal crate falls through and the rope is extended its full five feet. In each of these fifteen to twenty sessions, the hanging mechanisms functioned without error or incident.

14. If an ISDP elects hanging, the ISDP will be brought into the execution chamber and escorted directly to the window over-looking the witness room. Once at the window, the curtain is opened approximately six inches to allow the ISDP to be visually seen by the witnesses as he makes his last words. Once he has finished his last words, the curtains are closed. Once the curtains are closed, the witnesses cannot see the ISDP directly; however, the room is backlit so that the ISDP's shadow is visible. The witnesses are able to see the ISDP being escorted back to the rope, by seeing his shadow, and can see the rope placed around his neck and tightened. From the witness room, the witnesses can see the trap door fall and can see the lower third of the ISDP's body once the rope has extended the full five feet.

15. As of this date, Mr. Stenson has not elected hanging as his execution method. As such, preparations are still under way for both hanging and lethal injection.

16. I will be present in the execution chamber during Mr. Stenson's execution and will ensure that DOC Policy 490.200 is followed.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge.

DATED this 7th day of November, 2008, at Walla Walla, Washington.

STEPHEN D. SINCLAIR

APPENDIX J

DECLARATION OF FIONA JANE COUPER, Ph.D

I, FIONA JANE COUPER, make the following declaration:

1. I am over the age of eighteen years and am competent to testify to the matters set forth below.

2. I am employed as the Washington State Toxicologist. I have held this position since March 2008. My professional and educational qualifications are set forth in my curriculum vitae, a copy of which is provided as Attachment A to this declaration. As the Washington State Toxicologist, I oversee the Toxicology Laboratory Division, which includes a staff of 16 full time toxicologists and provides drug and alcohol testing for coroners, medical examiners, law enforcement agencies, and prosecuting attorneys. This position also involves supervision of the Washington State Patrol's Impaired Driving Section, consisting of the Breath Test Program, Drug Recognition Program and the Ignition Interlock Program. This involves overseeing the training and certification of technicians, operators and instructors, and the approval of all policies and procedures. I am also responsible for the supervision of the blood alcohol analyst program for Washington State, and I provide expert testimony on the effects of alcohol and drug intoxication, driving under the influence of alcohol and/or drugs, and blood and breath testing for alcohol and drugs.

3. I have reviewed the Department of Corrections Policy Directive 490.200, Capital Punishment, effective October 25, 2008.

4. Thiopental sodium is an ultra-short acting barbiturate typically used as an anesthetic and/or induction agent. It induces a deep, coma-like unconsciousness within 30-60 seconds, and typical anesthetic/induction doses are approximately 100-250 mg, rarely more than 1 gram. Following a 3 gram dose, respiratory functions would be significantly depressed or stopped within approximately one to two minutes. While unconscious, the subject would have no sense of physical pain or suffering.

5. Pancuronium bromide is a neuromuscular blocking agent (paralytic agent). It inhibits muscular-skeletal movements thereby paralyzing the diaphragm and other respiratory muscles, and stopping respiration. Typical therapeutic doses are 0.04-0.10 mg/kg. At a 100 mg dose, respiratory paralysis should occur within 30-60 seconds of administration. Additionally, the heart would stop beating within approximately one to three minutes.

6. Potassium chloride is a chemical compound that interferes with the electrical signals that stimulate the contractions of the heart. A dose of 240 mEq would be sufficient to cause death by cardiac arrest within approximately one to three minutes.

7. Based on my professional experience and review, it is my opinion that the proper administration of the three drugs listed under Section IX.A.4(d) of the policy, in the sequence and dosages specified, would be a fatal combination resulting in a swift and painless death.

8. It is my professional opinion that flushing the intravenous (IV) lines with 50 cc of normal saline solution after the administration of each of the first two drugs specified (thiopental sodium and pancuronium bromide) should prevent clogging in the IV lines.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Signed this 7th day of November, 2008, at Seattle, Washington.

FIONA JANE COUPER, Ph.D.

ATTACHMENT A

CURRICULUM VITAE
July 2008

FIONA JANE COUPER

Address: Toxicology Laboratory Division
Forensic Laboratory Services Bureau
Washington State Patrol
2203 Airport Way S., Suite 360
Seattle, WA 98134

Phone: (206) 262 6100
Fax: (206) 262 6145
Email: fiona.couper@wsp.wa.gov

EMPLOYMENT

Mar 2008 - present — **State Toxicologist, Toxicology Laboratory Division Commander**
Forensic Laboratory Services Bureau
Washington State Patrol
Mr. Larry Hebert (Interim Director, Forensic Laboratory Services Bureau)
Seattle, WA U.S.A.

Nov 2001 - Feb 2008 — **Chief Toxicologist, Director of Laboratory Services**
Toxicology Laboratory
District of Columbia, Office of the Chief Medical Examiner
Dr. Marie Pierre-Louis (Chief Medical Examiner)
Washington, D.C. U.S.A.

Sept 1998 - Oct 2001 — **Senior Fellow - Post Doctoral Fellowship and Forensic Toxicologist**
Department of Laboratory Medicine, University of Washington
Washington State Toxicology Laboratory
Dr. Barry K. Logan (Director, Forensic Laboratory Services Bureau)
Seattle, WA U.S.A.

April 1997 - Aug 1998 — **Research Fellow - Post Doctoral Fellowship**
National Institute of Forensic Science
Victorian Institute of Forensic Medicine
A/Professor Olaf H. Drummer (Head, Scientific Services)
Melbourne VIC, Australia

July 1994 - Dec 1994 — **Research Assistant 3 (Part time)**
Department of Social and Preventive Medicine
Caulfield General Medical Centre
Dr. Malcolm R. Sim (Head, Senior Lecturer)

ATTACHMENT A

Caulfield VIC, Australia

Nov 1992 - Aug 1998 **Forensic Toxicologist VPS 2 (Part time)**
Department of Forensic Medicine
Victorian Institute of Forensic Medicine
Dr. Iain M. McIntyre (Toxicology Laboratory Manager)
Melbourne VIC, Australia

EDUCATION

1989-1991 **Bachelor of Science,**
Faculty of Science, Monash University, Australia
Majors: Pharmacology-Toxicology, Biochemistry

1992 **Bachelor of Science (Honours)**, Pharmacology-Toxicology
Department of Pharmacology, and Department of Forensic Medicine
Monash University, Australia
Thesis: *Detection of Antidepressants and Antipsychotics in Human Scalp Hair*

1993-1997 **Doctor of Philosophy, Ph.D. (Med)**, Forensic Medicine-Forensic Toxicology
Department of Forensic Medicine, Monash University, Australia
Thesis: *The Involvement of β_2-Agonists in Asthma Deaths*

TEACHING EXPERIENCE, RESEARCH SUPERVISOR

1992 Pharmacology/Toxicology Laboratory Assistant
Department of Pharmacology, Monash University

1997 Research Co-supervisor – Karen van Loon, B.Sc. (Hons)
Department of Forensic Medicine, Monash University, Australia
Department of Pharmacy, University of Groningen, Netherlands

1999-2001 Lecturer – Medical Technology (Chemistry), LMED 322, 418
Department of Laboratory Medicine, University of Washington

1999-2001 Faculty Mentor/Supervisor – Senior Research Enrichment Program
Department of Laboratory Medicine, University of Washington

2002-2005 Instructor – The Effects of Drugs on Human Performance and Behavior
Robert F. Borkenstein Center for Studies of Law in Action
Department of Criminal Justice, Indiana University

PROFESSIONAL SOCIETIES, COMMITTEES

1992-1998 Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists
1993-1997 Victorian Asthma Mortality Study Group - Steering Committee
1994- present The International Association of Forensic Toxicologists (TIAFT)
1997-1999 TIAFT – member; Young Scientists Committee (Asia-Pacific Regional Representative)
1998- present Society of Forensic Toxicologists (SOFT)
1998- present American Academy of Forensic Sciences (AAFS)
1999-2001 Seattle King County - Community Epidemiology Working Group (NIDA-CEWG)
1999- 2003 TIAFT – member; Young Scientists Committee (U.S.A. Regional Representative)
1999- present SOFT – member; Drug-Facilitated Sexual Assault Committee
2000 International Consultative Workgroup on Drugs and Driving Impairment – delegate & rapporteur

2001	Guest reviewer for *Forensic Science Communications*
2001	Guest reviewer for the 2001 *Special Issue of the Journal of Analytical Toxicology*
2001	Guest reviewer for *Journal of Analytical Toxicology*
2001- 2003	Editorial Board for the AAFS Toxicology Section's *News & Views*
2001- present	SOFT/AAFS – member; Joint Drugs and Driving Committee
2002- 2005	SOFT/AAFS – Chair; Joint Drugs and Driving Committee
2002	SOFT – member; Nominating Committee
2002	Guest reviewer for the 2002 *Special Issue of the Journal of Analytical Toxicology*
2003	Guest reviewer for *Forensic Science International*
2004	Guest reviewer for the 2004 *SOFT/TIAFT Special Issue of Forensic Science International*
2004	Guest reviewer for the 2004 *Special Issue of the Journal of Analytical Toxicology*
2005	Guest reviewer for the 2005 *Special Issue of the Journal of Analytical Toxicology*
2006	Guest reviewer for the 2006 *Special Issue of the Journal of Analytical Toxicology*
2006 - present	AAFS – member; Toxicology Awards and Scholarships Committee
2006	SOFT Annual Meeting, Scientific Program Chair

SCHOLARSHIPS, AWARDS, FELLOWSHIPS

1993-1996	Monash Graduate Scholarship, Monash University, Australia
1995	Conference Grant-In-Aid Scholarship, Monash University, Australia
1997-1998	National Institute of Forensic Science, Australia - Research Fellowship
1998-2001	University of Washington, U.S.A. - Postdoctoral Fellowship
2004	Paul Coverdell Forensic Science Improvement Grant
2006	Irving Sunshine Award, American Academy of Forensic Sciences

PUBLICATIONS (Peer Reviewed)

1. Extraction of Psychotropic Drugs from Human Scalp Hair
   Couper FJ, McIntyre IM, Drummer OH. *Journal of Forensic Sciences* 1995; 40: 83-86
2. Detection of Antidepressant and Antipsychotic Drugs in Postmortem Human Scalp Hair
   Couper FJ, McIntyre IM, Drummer OH. *Journal of Forensic Sciences* 1995; 40: 87-90
3. Gas Chromatographic-Mass Spectrometric Determination of β_2-Agonists in Postmortem Blood: Application in Forensic Medicine
   Couper FJ, Drummer OH. *Journal of Chromatography* 1996; 685: 265-272
4. Reviewing Mortality
   Abramson M, **Couper F**, Campbell D, and The Victorian Asthma Mortality Study Group. *Clinical Asthma Reviews* 1998; 2: 21-25
5. Postmortem Stability and Interpretation of β_2-Agonist Concentrations
   Couper FJ, Drummer OH. *Journal of Forensic Sciences* 1999; 44 (3): 523-526
6. Determination of γ-Hydroxybutyrate (GHB) in Biological Specimens by Gas Chromatography-Mass Spectrometry
   Couper FJ, Logan BK. *Journal of Analytical Toxicology* 2000; 24: 1-7.
7. Are Asthma Medications and Management Related to Deaths from Asthma?
   Abramson MJ, Bailey M, **Couper F**, Driver JS, Drummer OH, Forbes AB, McNeil JJ, Walters E.H. *American Journal of Respiratory and Critical Care Medicine* 2001; 163: 12-18
8. Zolpidem and Driving Impairment
   Logan BK, **Couper FJ**. *Journal of Forensic Sciences* 2001; 46 (1): 102-107
9. GHB and Driving Impairment
   Couper FJ, Logan BK. *Journal of Forensic Sciences* 2001; 46(4): 151-155.

10. 3,4-Methylenedioxymethamphetamine (MDMA, Ecstasy) and Driving Impairment
    Logan BK, **Couper FJ**. *Journal of Forensic Sciences* 2001; 46(6): 1426-1433.
11. Prevalence of Drug Use in Commercial Tractor-Trailer Drivers
    Couper FJ, Pemberton M, Jarvis A, Hughes M, Logan BK.
    Journal of Forensic Sciences 2002; 47(3): 562-567.
12. γ-Hydroxybutyrate (GHB): Effects on Human Performance and Behavior
    Couper FJ, Marinetti L. *Forensic Science Review* 2002; 14(1/2): 101-121.
13. 3,4-Methylenedioxymethamphetamine – Effects on Human Performance and Behavior
    Logan BK, **Couper FJ**. *Forensic Science Review* 2003; 15(1): 11-28.
14. Drugs and Human Performance Fact Sheets
    Couper F, Logan B. Washington, DC: U.S. Department of Transportation, *NHTSA Technical Report No. DOT HS 809 725*. April 2004.
15. Suspected GHB Overdoses in the Emergency Department
    Couper FJ, Thatcher JE, Logan BK. *J Analytical Toxicology* 2004; 28(6): 481-484.
16. Addicted to Driving Under the Influence – a GHB/GBL Case Report
    Couper FJ, Logan BK. *J Analytical Toxicology* 2004; 28(6): 512-515.
17. Forensic Applications of New Analytical Technologies
    Couper F, Gluodenis T, Jensen M, Klee M, Neufeld L, Quimby B, Zarwell L, Zweigenbaum. *Forensic Magazine* April/May 2005.
18. Substance misuse: Cocaine and other stimulants
    Couper FJ. In: *Encyclopedia of Forensic and Legal Medicine*; Elsevier Limited; UK 2005; 141-144.
19. Substance misuse: Sedatives
    Couper FJ. In: *Encyclopedia of Forensic and Legal Medicine*; Elsevier Limited; UK 2005; 163-164.
20. Substance misuse: Miscellaneous (volatiles, hallucinogens and 'club' drugs)
    Couper FJ. In: *Encyclopedia of Forensic and Legal Medicine*; Elsevier Limited; UK 2005; 165-170.
21. Fatal Methadone Intoxication in an Infant
    Couper FJ, Chopra K, Pierre-Louis M. *Forensic Science International* 2005; 153(1): 71-3.

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1. Detection of Psychotropic Drugs in Human Scalp Hair
   Couper F, McIntyre I, Drummer O. In: Reid JJ, Ching MS (editors). Clinical and Experimental Pharmacology and Physiology (Suppl. 21). Blackwell Scientific, Melbourne, Australia; 1993; 15
2. Method for Quantifying Antidepressant and Antipsychotic Drug Levels in Postmortem Human Scalp Hair
   Couper F, McIntyre I, Drummer O. In: Muller K (editor). Contribution to Forensic Toxicology. MolinApress, Leipzig, Germany; 1994; 160-162
3. Detection of Antidepressant and Antipsychotic Drugs in Human Scalp Hair
   Couper F, McIntyre I, Drummer O. In: Jacob B, Bonte W (editors). Advances in Forensic Science. Verlag Dr. Koster, Berlin, Germany; 1995; 5: 40-42
4. Toxicological Analysis of Asthmatic Deaths
   Couper FJ, Drummer OH. In: Kovatsis AV, Tsoukali-Papadopouou H (editors). Aspects on Forensic Toxicology. Tecnika Studio, Thessaloniki, Greece; 1995; 20-23
5. Blood Salbutamol Levels are Higher in Asthma Deaths than Controls
   Abramson M, Driver J, Willis J, Evans N, **Couper F**, Drummer O, McNeil J, Walters E. Proceedings of the National Asthma Conference and Workshop. Melbourne, Australia, 1995
6. Detection of Antidepressant Drugs in Hair
   Drummer O, **Couper F**. In: De Zeeuw RA, Hosani IA, Munthiri SA, Maqbool A (editors). Hair Analysis in Forensic Toxicology, Abu Dhabi. 1995; 217-224

7. Extraction of Psychotropic Drugs in Hair

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8. Toxicological Analysis of Asthmatic Deaths
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9. Blood Salbutamol Levels are Higher in Asthma Deaths than Controls
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10. Blood Salbutamol Levels are Higher in Asthma Deaths than Controls
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11. Asthma Medications, Blood Salbutamol Levels and Mortality from Asthma
Abramson M, Driver J, Bailey M, Willis J, Evans N, **Couper F**, Drummer OH, Walters EH, Coleridge J, Maclean A, Thomson G. Proceedings of The Thoracic Society of Australia and New Zealand. Wellington, New Zealand, 1997
12. Postmortem Interpretation of β_2-Agonist Concentrations
Couper FJ, Drummer OH. Proceedings of The International Association of Forensic Toxicologists 35th Meeting. Padova, Italy; 1997; 19-25
13. Blood Salbutamol Levels are Higher in Asthma Deaths than Controls after Adjusting for Administration and Severity
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14. The Application of Hair Analysis to Detect Anabolic Steroid Use in Humans
Couper FJ, Drummer OH. Proceedings of The 14th International Symposium on the Forensic Sciences. Adelaide, Australia, 1998
15. The Involvement of β_2-Agonists in Asthma Deaths
Couper FJ, Drummer OH, Abramson MJ. Proceedings of the American Academy of Forensic Sciences. Orlando FL, U.S.A., 1999
16. Drug-Facilitated Sexual Assault
Couper F. Law Enforcement Digest. Washington, U.S.A., June 1999
17. The Determination of GHB in Clinical and Postmortem Specimens
Couper F, Logan B. Proceedings of the Society of Forensic Toxicologists meeting, Puerto Rico, U.S.A., 1999.
18. Pharmacological Facilitation of Robbery: Analysis of Two Cases from the Emergency Department
Blaho KE, Park LJ, Logan BK, **Couper F**, Winbery SL. Proceedings of the Society of Forensic Toxicologists meeting, Puerto Rico, USA, 1999.
19. Zolpidem and Driving Impairment
Logan BK, **Couper FJ**. Proceedings of the American Academy of Forensic Sciences meeting, Reno NV, U.S.A., 2000.
20. Determination of Drug Use in Tractor-Trailer Drivers: "Operation Trucker Check"
Couper FJ, Anonical A, Pemberton M, Logan BK. Proceedings of the American Academy of Forensic Sciences meeting, Reno NV, U.S.A., 2000.
21. Driving Under the Influence of GHB
Couper FJ, Logan BK. Proceedings of the Society of Forensic Toxicologists meeting, Milwaukee WI, U.S.A., 2000
22. Suspected GHB Overdoses in the Emergency Room
Couper FJ, Thatcher JE, Logan BK. Proceedings of the American Academy of Forensic Sciences meeting, Seattle WA, U.S.A., 2001.
23. A Combined Drug Intoxication Involving Metaxalone (Skelaxin®)
Zarwell LW, Colvin SM, **Couper FJ**. Proceedings of the SOFT-TIAFT-FBI Forensic Toxicology meeting, Washington DC, U.S.A., 2005

PRESENTATIONS (* Invited Speaker)

1. "Detection of Psychotropic Drugs in Human Scalp Hair"
Couper FJ. Presentation at the Department of Pharmacology and Toxicology, Monash University, Melbourne, Australia, October 9, 1992
2. "Detection of Psychotropic Drugs in Human Scalp Hair"
Couper FJ. Presentation at the Australian Society of Clinical and Experimental Pharmacologists and Toxicologists 26th Meeting, Sydney, Australia, December 9, 1992
3. "Method for Quantifying Antidepressant and Antipsychotic Drug Levels in Postmortem Human Scalp Hair"
Couper FJ. Presentation at The International Association of Forensic Toxicologists 31st International Meeting, Leipzig, Germany, August 16, 1993
4. "Detection of Antidepressant and Antipsychotic Drugs in Human Scalp Hair"

Couper FJ. Presentation at the International Association of Forensic Sciences 13th International Meeting, Dusseldorf, Germany, August 23, 1993

5. "Toxicological Analysis of Asthmatic Deaths"
Couper FJ. Presentation at The 33rd International Congress on Forensic (TIAFT) and 1st Environmental Toxicology Meeting, Thessaloniki, Macedonia, Greece, August 31, 1995
6. "Blood Salbutamol Levels are Higher in Asthma Deaths than Controls"
Abramson M, Driver J, Willis J, Evans N, **Couper F**, Drummer O, McNeil J, Walters E. Presentation at the National Asthma Conference and Workshop, Melbourne, Australia, 1995
7. "Detection of Antidepressant Drugs in Hair"
Drummer O, **Couper F**. Presentation at the International Conference and Workshop for Hair Analysis in Forensic Toxicology, Abu Dhabi, November 1995
8. "Extraction of Psychotropic Drugs in Hair"
Drummer O, **Couper F**. Presentation at the International Conference and Workshop for Hair Analysis in Forensic Toxicology, Abu Dhabi, November 1995
9. "Blood Salbutamol Levels are Higher in Asthma Deaths than Controls"
Abramson M, Driver J, Willis J, Evans N, **Couper F**, Drummer O, McNeil J, Walters E. Presentation at the Thoracic Society of Australia and New Zealand meeting, Perth, Australia, March 1996
10. "Blood Salbutamol Levels are Higher in Asthma Deaths than Controls"
Coleridge J, Maclean A, Thomson G, Driver J, Willis J, Evans N, **Couper F**, Drummer O, Walters E, Abramson M. Presentation at the 6th International Conference on Emergency Medicine, Sydney, Australia, May 1996
11. "Toxicological Analysis of Asthmatic Deaths"
Couper FJ. Presentation at The Australian and New Zealand Forensic Science Society 12th International Symposium on the Forensic Sciences, Sydney, Australia, September 10, 1996
12. "Asthma Medications, Blood Salbutamol Levels and Mortality from Asthma"
Abramson M, Driver J, Bailey M, Willis J, Evans N, **Couper F**, Drummer OH, Walters EH, Coleridge J, Maclean A, Thomson G. Presentation at the Thoracic Society of Australia and New Zealand meeting, Wellington, New Zealand, March 1997
13. "The Involvement of β_2-Agonists in Asthma Deaths"
Couper FJ. Presentation at the Victorian Institute of Forensic Medicine, Melbourne, Australia, March 20, 1997
14. "Postmortem Interpretation of β_2-Agonist Concentrations"
Couper FJ. Presentation at The International Association of Forensic Toxicologists 35th meeting, Padova, Italy, August 25, 1997

*15. "The Involvement of β_2-Agonists in Asthma-Related Deaths"
Couper FJ. Lecture at the Department of Respiratory Medicine & The Inner and Eastern Health Care Network, Respiratory Conference, Melbourne, Australia, November 4, 1997

16. "The Application of Hair Analysis to Detect Anabolic Steroid Use in Humans"
Couper FJ. Presentation at the Victorian Institute of Forensic Medicine, Melbourne, Australia, August 20, 1998
17. "The Role of β_2-Agonists in Asthma Deaths"
Couper FJ. Presentation at the Washington State Toxicology Laboratory, WA, U.S.A., September 18, 1998
18. "The Application of Hair Analysis to Detect Anabolic Steroid Use in Humans"
Couper FJ, Drummer OH. Presentation at the 14th International Symposium on the Forensic Sciences meeting, Adelaide, Australia, October 1998
19. "Blood Salbutamol Levels are Higher in Asthma Deaths than Controls after Adjusting for Administration and Severity"
Abramson M, Bailey M, **Couper F**, Drummer O, Forbes A, McNeil J, Walters EH. Presentation at the World Asthma Meeting, Barcelona, Spain, December 11, 1998
20. "Date Rape: How Often Are Drugs Found?"
Couper FJ. Training Seminar for the Madigan Army Medical Center and University of Washington Emergency Medicine Residency, Emergency Medicine Grand Rounds: Medical Toxicology, University of Washington, WA, U.S.A., January 13, 1999
21. "The Involvement of β_2-Agonists in Asthma Deaths"
Couper FJ. Presentation at the American Academy of Forensic Sciences meeting, Orlando FL, February 18, 1999

*22. "Date Rape Drugs"
Couper FJ. Training Seminar for the Wahkiakum County Prosecuting Attorney's Office, Cathlamet, WA, U.S.A., June 17, 1999

23. "The Determination of GHB in Clinical and Postmortem Specimens"
Couper FJ. Presentation at the Society of Forensic Toxicologists meeting, San Juan PR, October 15, 1999

24. "Pharmacological Facilitation of Robbery: Analysis of Two Cases from the Emergecy Department"

Blaho KE, Park LJ, Logan BK, **Couper F**, Winbery SL. Presentation at the Society of Forensic Toxicologists meeting, San Juan PR, October 15, 1999

25. "Drug Facilitated Sexual Assaults"
Couper FJ. Presentation at the Washington State Toxicology Laboratory, WA, U.S.A., November 23, 1999
26. "Interpretation of GHB Concentrations in Clinical and Postmortem Specimens"
Couper FJ. Presentation at the Washington State Toxicology Laboratory, WA, U.S.A., November 23, 1999
27. "Toxicology of Heroin-Related Deaths"
Couper FJ. Presentation at the Preventing Heroin Overdose: Pragmatic Approaches Conference, Sheraton Towers, Seattle, WA, U.S.A., January 14, 2000
*28. "Medical Advocacy for Sexual Assault Victims: Rape Facilitating Drugs"
Couper FJ. Training Seminar for the Washington Coalition of Sexual Assault Programs, Olympia, WA, U.S.A., February 10, 2000
29. "The Prevalence of Drug Use in Tractor-Trailer Drivers: "Operation Trucker Check""
Couper FJ. Presentation at the Washington State Toxicology Laboratory, WA, U.S.A., February 17, 2000
30. "Zolpidem and Driving Impairment"
Logan BK, **Couper FJ**. Presentation at the American Academy of Forensic Sciences meeting, Reno NV, February 24, 2000
31. "Determination of Drug Use in Tractor-Trailer Drivers: "Operation Trucker Check""
Couper FJ. Presentation at the American Academy of Forensic Sciences meeting, Reno NV, February 25, 2000
*32-35. "Women and Domestic Violence: Evidence Collection and the Crime Scene – Emphasis on Domestic Violence and Sexual Assault"
Couper FJ. Four Training Seminars for the Violence Against Women Act Stop Grant, Seattle, Bellevue and Kent, WA, U.S.A., April-May 2000
*36. "Recognition of Drug-Facilitated Sexual Assault"
Couper FJ. Training Seminar for student-advocates at Pacific Lutheran University, Tacoma, WA, U.S.A., April 28, 2000
*37. "Recognition of Drug-Facilitated Sexual Assault"
Couper FJ. Training Seminar for the Puget Sound Sexual Assault Centre, Tacoma, WA, U.S.A., June 21, 2000
38. "Drugs and Driving at the State Toxicology Laboratory"
Couper FJ. DRE Field In-Service Training Seminar, Evergreen State College, Olympia, WA, July 11, 2000
*39. "GHB and Date Rape Drugs"
Couper FJ. Lecture at the King County Medical Examiners Office, Seattle, WA, July 19, 2000
*40. "GHB and Driving Impairment"
Couper FJ. Presentation at the International Consultative Meeting on Drugs and Driving Impairment, Seattle, WA, July 31, 2000
*41. "Advances in Toxicology: Date Rape Drugs – Washington State Experience"
Couper FJ. Presentation at the Harborview Center for Sexual Assault and Traumatic Stress - Emergency Department Update: Acute Care for Sexual Assault Patients conference, Seattle, WA, September 26, 2000
42. "Driving Under the Influence of GHB"
Couper FJ. Presentation at the Society of Forensic Toxicologists meeting, Milwaukee WI, October 4, 2000
*43. "Forensic Services in Washington State"
Couper FJ. Training Seminar for the Northwest Medical Laboratory Symposium 2000, Tacoma WA, October 19, 2000
*44. "Recognizing Drug-Facilitated Sexual Assault"
Couper FJ. Training Seminar for the Seattle Police Department - Special Assault Unit, Seattle WA, October 25, 2000
*45. "Drug-Facilitated Sexual Assault – Washington State Experience"
Couper FJ. Training Seminar for the King County Prosecutors Office, Seattle WA, October 26, 2000
*46. "Analytical Methodologies for MDMA"
Couper FJ. Presentation at the American Academy of Forensic Sciences meeting, Seattle WA, February 19, 2001
47. "Case Reports of Drivers Impaired by MDMA"
Logan BK, **Couper FJ**. Presentation at the American Academy of Forensic Sciences meeting, Seattle WA, February 19, 2001
48. "Effects of Drugs on Human Performance – Fact Sheets"
Couper FJ. Presentation at the American Academy of Forensic Sciences meeting, Seattle WA, February 20, 2001
*49. "General Analytical Approaches to DFSA in Washington State"
Couper FJ. Presentation at the American Academy of Forensic Sciences meeting, Seattle WA, February 20, 2001
50. "Suspected GHB Overdoses in the Emergency Room"
Couper FJ. Presentation at the American Academy of Forensic Sciences meeting, Seattle WA, February 21, 2001
*51. "Street Drug Scene Update: A Toxicologist's View"
Couper FJ. Presentation at the 14th Annual Northwest Conference on Addictions, Seattle WA, May 2, 2001

*52. "Advances in Toxicology: Date Rape Drugs"
Couper FJ. Presentation at the Conference on Acute Care for Sexual Assault Patients: Advances in Diagnosis, Treatment, and Forensic Investigation, Yakima WA, May 17, 2001

53. "Addicted to DUI – a GHB / GBL Case Report"
Couper FJ. Presentation at the Society of Forensic Toxicologists meeting, New Orleans LA, October 3, 2001

*54. "How do we know that a person's use of prescription and O-T-C medications affects their ability to operate a motor vehicle?"
Couper FJ. Presentation at the National Transportation Safety Board - Food and Drug Administration Joint Public Meeting, Washington DC, November 14, 2001

55. "GHB: Use and Abuse"
Couper FJ. Presentation at the American Academy of Forensic Sciences meeting, Atlanta GA, February 11, 2002

56. "CNS Depressants: Is this Driver Impaired by Drugs?"
Couper FJ. Presentation at the American Academy of Forensic Sciences meeting, Atlanta GA, February 12, 2002

*57. "Selected CNS Depressant Drugs and Their Effects on Driving"
Couper FJ. Presentation at the inaugural Robert F. Borkenstein Center for Studies of Law in Action course on The Effects of Drugs on Human Performance and Behavior, Bloomington IN, March 25, 2002

*58. "GHB: Use and Abuse"
Couper FJ. Presentation at the Armed Forces Institute of Pathology, Rockville MD, April 25, 2002

59. "The Role of Toxicology in Death Investigations"
Couper FJ. Presentation at the Homicide School, Washington DC, June 6, 2002

60. "The Role of Toxicology in Death Investigations"
Couper FJ. Presentation at the Homicide School, Washington DC, February 11, 2003

*61. "Selected CNS Depressant Drugs and Their Effects on Driving"
Couper FJ. Presentation at the Robert F. Borkenstein Center for Studies of Law in Action course on The Effects of Drugs on Human Performance and Behavior, Bloomington IN, March 17-18, 2003

*62. "Hallucinogens"
Couper FJ. Presentation at the FBI Laboratory Symposium on Forensic Toxicology. Washington DC, August 28-29, 2004

*63. "CNS Depressant Drugs and Human Performance"
Couper FJ. Presentation at the Robert F. Borkenstein Center for Studies of Law in Action course on The Effects of Drugs on Human Performance and Behavior, Bloomington IN, September 20-22, 2004

*64. "Interpretive Toxicology & Drug Impaired Driving"
Couper FJ. Instructor at the Drug Impaired Driving Workshop, The Arizona DPS Crime Laboratory, Phoenix, AZ, November 29 – December 3, 2004

65. "The Role of the Toxicology Laboratory in DUI Cases"
Couper FJ. Presentation at the D.C. United DWI Training (O.A.G., M.P.D., U.S.C.P., U.S.P.P., U.S.S.S., F.B.I), Washington DC, May 20, 2005

*66. "Drug-Facilitated Sexual Assaults"
Couper FJ. Presentation to the U.S. Attorney's Office, Metropolitan Police Department and U.S. Park Police sexual assault investigators, Washington DC, June 28, 2005

*67. "Introduction to Drugged Driving"
Couper FJ. Presentation at the combined SFST Training (U.S.P.P. and M.P.D.), Bolling Airforce Base, Washington DC, March 29, 2007

*68. "The Role of Toxicology in DUI Investigations"
Couper FJ. Presentation at the D.C. Attorney General Court Training (O.A.G., M.P.D., U.S.S.S.), Washington DC, December 6, 2007

69. "WSP State Toxicology Laboratory Division update"
Couper FJ, Jones KE. Presentation at the WAPA District Court Training, Leavenworth WA, May 28, 2008

APPENDIX K

DECLARATION OF MARK DERSHWITZ, M.D., Ph.D.

1. I am a medical doctor with a Ph. D. in Pharmacology. A true and accurate copy of my curriculum vitae is attached as Exhibit A. I am licensed to practice medicine in the states of Massachusetts and Maine. I am currently an anesthesiologist at the University of Massachusetts and I am certified by the American Board of Anesthesiology. I am currently Professor of Anesthesiology and Biochemistry & Molecular Pharmacology at the University of Massachusetts.

2. I have done extensive research and written numerous review articles and research papers on the use of anesthetics and I regularly practice medicine in that capacity. My research includes the study of pharmacodynamics and the pharmacokinetics of drugs. Pharmacokinetics is the study of the time course of a drug, while pharmacodynamics refers to the effects of a drug. Prior to my current appointment at the University of Massachusetts, I was an Instructor, Assistant Professor and Associate Professor at Harvard Medical School.

3. I have testified as an expert witness concerning the pharmacokinetics and the pharmacodynamics of anesthetic drugs and other medications. I have testified in court as an expert witness on seventeen occasions. I have given thirty-six depositions as an expert witness.

4. I have reviewed the protocols for the lethal injections used in the states of Arkansas, Alabama, California, Florida, Georgia, Kentucky, Maryland, Missouri, Montana, North Carolina, Ohio, Oklahoma, South Carolina, Texas and Virginia and by the federal government. In addition, I have reviewed the document from

the State of Washington Department of Corrections entitled, "Capital Punishment," and numbered "DOC 490.200." Each of the states and the federal government employ similar protocols for carrying out lethal injections. While the protocols and the jurisdictions differ in terms of the doses of the three medications used, each of these protocols will render an inmate unconscious quickly and cause the inmate's rapid and painless death.

5. Some medical paraprofessionals, such as nurses, emergency medical technicians, and paramedics, may be trained to insert intravenous catheters. If a medical paraprofessional routinely inserts intravenous catheters as a part of his or her regular job, it is reasonable to assign the task of inserting the intravenous catheter in an inmate to this person.

6. The protocol used in Washington states that medications will be administered as follows:

a Thiopental sodium, 3 grams, will be injected.

b. Saline, 50 mL, will be injected to flush the IV line.

c. The Superintendent will observe the inmate for signs of consciousness. If the Superintendent observes that the inmate is conscious, an additional dose of thiopental sodium, 3 grams, will be injected.

d. Pancuronium bromide, 100 mg, will be injected.

e. Saline, 50 mL, will be injected to flush the IV line.

f. Potassium chloride, 240 mEq, will be injected.

g. The superintendent will direct the physician on site to examine the inmate

and pronounce death.

7. I have performed a pharmacodynamic analysis to predict the probability of response as a function of the predicted brain concentration of thiopental. This analysis is attached as Exhibit B. There are two responses to thiopental depicted in Exhibit B. The first response is the probability of unconsciousness. In this context, unconsciousness is defined as the drug-induced inability to perform a simple command such as "raise your right arm." An unconscious person is unable to perceive his or her environment. The second response is the probability of burst suppression. Burst suppression is a state of the brain as measured by an electroencephalograph (EEG) in which the EEG demonstrates the periodic absence of electrical activity. This state is readily demonstrable during the administration of clinical anesthesia for surgical procedures by using available clinical monitors. While burst suppression is easy to measure, it is a state of anesthesia that is deeper than that required for the performance of surgery.

8. I have performed a pharmacokinetic analysis to predict the brain concentration of thiopental in a man weighing 106 kg following the administration of a 3-gram dose of thiopental sodium. I assumed that the thiopental solution was injected at a rate of 50 mg/sec (50 milligrams per second). My pharmacokinetic analysis is attached as Exhibit C. This pharmacokinetic graph shows the predicted concentration of thiopental in the brain of a 106-kg man as a function of time following a dose of 3 grams. The y-axis is the predicted concentration of

thiopental in the brain measured in mcg/mL (micrograms per milliliter). The x-axis is time in minutes. As shown in Exhibit C, after the administration of 3 grams of thiopental sodium, the brain concentration of thiopental would peak at a concentration of about 84 mcg/mL about 3.5 minutes after beginning the injection.

9. The lower dashed line in Exhibit C indicates the brain concentration at which there is an approximately 95% probability of unconsciousness. This predicted concentration is exceeded for more than an hour following the beginning of the injection, assuming that the inmate continued to breathe.

10. The upper dashed line in Exhibit C indicates the brain concentration at which there is an approximately 95% probability of burst suppression. This predicted concentration is exceeded for approximately ten minutes following the beginning of the injection, assuming that the inmate continued to breathe.

11. A dose of 3 grams of thiopental sodium will cause virtually all persons to stop breathing. Thus, although the subsequent administration of pancuronium bromide, a paralytic agent, would have the effect of paralyzing the person and preventing him or her from being able to breathe, virtually every person given 3 grams of thiopental sodium will have stopped breathing prior to the administration of pancuronium bromide. Thus, even in the absence of the administration of pancuronium bromide and potassium chloride, the administration of 3 grams of thiopental sodium by itself would cause death to almost everyone.

12. I have co-authored a recently published article discussing in much greater detail the pharmacology of the medications used in lethal injection. This article is appended as Exhibit D.

13. Therefore, it is my opinion to a reasonable degree of medical certainty that there is an exceedingly small risk that a condemned inmate to whom 3 grams of thiopental sodium is properly administered pursuant to the lethal injection protocol of the State of Washington would experience any pain and suffering associated with the administration of lethal does of pancuronium bromide and potassium chloride.

14. It is my opinion to a reasonable degree of medical certainty, the proper application of the of the State of Washington lethal injection protocol will result in the condemned inmate undergoing a rapid, painless and humane death, and furthermore, the inmate will not experience any unnecessary pain or suffering.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on November 3, 2008

By /Mark Dershwitz M.D./
Mark Dershwitz, M.D., Ph.D.

EXHIBIT A

CURRICULUM VITAE

(prepared 3 November 2008)

NAME: Mark Dershwitz

ADDRESS: 33 Wildwood Drive
Sherborn, MA 01770
Telephone (508) 651-1120

PLACE OF BIRTH: Dearborn, MI

EDUCATION:

1974	B.A. cum laude Chemistry, with Departmental Honors Oakland University, Rochester, MI 48063
1982	Ph.D. (Pharmacology) Northwestern University, Evanston, IL 60201
1982	M.D. Northwestern University, Chicago, IL 60611

POSTDOCTORAL TRAINING:

INTERNSHIPS AND RESIDENCIES:

1983	Transitional Resident Carney Hospital, Boston, MA 02124
1984-1986	Resident in Anesthesia Massachusetts General Hospital, Boston, MA 02114

RESEARCH FELLOWSHIPS:

1986-1988	Department of Anesthesia Massachusetts General Hospital, Boston, MA 02114

LICENSURE AND CERTIFICATION:

1984	Massachusetts
1987	American Board of Anesthesiology
1990	Maine
2005	American Board of Anesthesiology, Maintenance of Certification in Anesthesiology

ACADEMIC APPOINTMENTS:

1977-1979	Lecturer in Pharmacology, Illinois College of Podiatric Medicine
1979-1982	Lecturer in Pharmacology, Illinois College of Optometry
1984-1987	Clinical Fellow in Anæsthesia, Harvard Medical School
1987-1990	Instructor in Anæsthesia, Harvard Medical School
1990-1997	Assistant Professor of Anæsthesia, Harvard Medical School
1997-2000	Associate Professor of Anæsthesia, Harvard Medical School
2000-	Professor and Academic Vice Chair of Anesthesiology Professor of Biochemistry & Molecular Pharmacology University of Massachusetts Medical School

HOSPITAL APPOINTMENTS:

1986-1990	Assistant in Anesthesia, Massachusetts General Hospital
1990-1996	Assistant Anesthetist, Massachusetts General Hospital
1996-2000	Associate Anesthetist, Massachusetts General Hospital
2000-2002	Clinical Associate in Anesthesia, Massachusetts General Hospital
2000-	Anesthesiologist, UMass Memorial Medical Center

AWARDS AND HONORS:

1972	Michigan Higher Education Association Scholarship
1972-1974	Oakland University Competitive Scholarship
1973-1974	National Merit Scholarship
1979	American Society for Pharmacology and Experimental Therapeutics Travel Award
1981	Biophysical Society Samuel A. Talbot Award
1982	Alpha Omega Alpha Research Award
1986-1988	NIH National Research Service Award
2001	Distinguished Alumnus Award Oakland University Department of Chemistry
2002	Outstanding Teacher Award University of Massachusetts Department of Anesthesiology
2003	Outstanding Medical Educator Award University of Massachusetts Medical School
2003	Outstanding Teacher Award University of Massachusetts Department of Anesthesiology
2004-	Listed in **Who's Who in America**
2005	Teaching Recognition Award, Honorable Mention International Anesthesia Research Society

MEMBERSHIPS IN PROFESSIONAL SOCIETIES:

Association of University Anesthesiologists
American Society of Anesthesiologists
American Society for Pharmacology and Experimental Therapeutics
American Society for Clinical Pharmacology and Therapeutics
International Anesthesia Research Society
Biophysical Society
International Society for Anesthetic Pharmacology
Massachusetts Medical Society
Anesthesia History Association

RESEARCH INTERESTS:

Intravenous anesthetics
Antiemetics
Monitoring depth of anesthesia
Malignant hyperthermia

RESEARCH FUNDING:

1986-1988	National Institutes of Health GM11656 (PI) The role of glutathione in malignant hyperthermia
1988-1989	Anaquest, Inc. (PI) Comparison of the sedative effects of midazolam and butorphanol
1989-1990	Glaxo, Inc. (Co-I) A randomized, double-blind comparison of intravenous ondansetron and placebo in the prevention of postoperative nausea and vomiting in female patients undergoing abdominal gynecological surgical procedures
1990-1991	Glaxo, Inc. (Co-I) A randomized, double-blind, placebo-controlled study of the effects of two dose levels of intravenous ondansetron on respiratory depression induced by alfentanil in healthy male volunteers
1991-1992	Glaxo, Inc. (Co-I) A dose finding and comparative trial of GI87084B and alfentanil for anesthesia maintenance
1992-1993	Glaxo, Inc. (Co-I) Pharmacokinetics and pharmacodynamics of GI87084B in subjects with hepatic impairment compared to subjects with normal hepatic function

1993-1994	Marion Merrell Dow, Inc. (PI) A randomized, double-blind, placebo-controlled, dose response trial to assess single dose intravenous dolasetron mesylate in patients experiencing postoperative nausea and vomiting
1993-1994	Marion Merrell Dow, Inc. (PI) A randomized, double-blind, placebo-controlled, dose response trial to assess single dose intravenous dolasetron mesylate in preventing postoperative nausea and vomiting
1993-1994	Glaxo, Inc. (Co-I) Pharmacokinetics and pharmacodynamics of GI87084B in subjects with renal impairment compared to subjects with normal renal function
1995-1996	Glaxo, Inc. (PI) A randomized, double-blind, dose-response study of ondansetron in the prevention of postoperative nausea and vomiting in inpatients
1996-1997	Aradigm Corporation (Co-I) Comparison of the pharmacokinetics and pharmacodynamics of inhaled versus intravenous morphine sulfate in healthy volunteers
1999-2000	Searle, Inc. (PI) Clinical Protocol for a Double-blind, Placebo-Controlled, Randomized Study of the Efficacy of Parecoxib 20 mg IV and Parecoxib 40 mg IV Given Postoperatively to Determine Narcotic-Sparing Effectiveness in a Post-General Surgery Pain Model

CLINICAL RESPONSIBILITIES:

1986-1988	Attending Anesthesiologist (20% clinical responsibility) Massachusetts General Hospital
1988-2000	Attending Anesthesiologist (50% clinical responsibility) Massachusetts General Hospital
1994-1997	Team Leader, East-West Anesthesia Service Massachusetts General Hospital
1997-2000	Team Leader, General Surgery Anesthesia Service Massachusetts General Hospital
2000-	Attending Anesthesiologist (45% clinical responsibility) UMass Memorial Medical Center

TEACHING EXPERIENCE:

1976-1980	Dental Hygiene Pharmacology Northwestern University Dental School 5 hours and Course Director
1977-1979	Medical Pharmacology Illinois College of Podiatric Medicine 22 hours and Course Director
1978-1981	Dental Pharmacology Northwestern University Dental School 3 hours
1979-1982	General Pharmacology Illinois College of Optometry 20 hours and Course Director
1979-1982	Ocular Pharmacology Illinois College of Optometry 10 hours and Course Director
1980-1981	Nursing Pharmacology, Northwestern University 5 hours
1994-	HST 150 Introduction to Pharmacology Harvard-MIT Program in Health, Science and Technology 4 hours
1996-	Harvard Anesthesia Review and Update 1-2 hrs
2001-	Medical Pharmacology University of Massachusetts Medical School 11-16 hrs and Course Co-Director
2007-	Medical Biochemistry University of Massachusetts Medical School 2 hrs

VISITING PROFESSORSHIPS:

April 6-7, 1994:	University of Pennsylvania
May 17-18, 1994:	University of North Carolina at Chapel Hill
Sept. 20-22, 1994:	State University of New York at Stony Brook
April 5-6, 1995:	Albany Medical College
May 8-10, 1997:	University of Texas Southwestern Medical Center
Dec. 8-9, 1998	Temple University
Dec. 16-17, 1998	University of Pittsburgh

COMMITTEE MEMBERSHIPS:

LOCAL:

2000 -	Pharmacy and Therapeutics Committee UMass Memorial Medical Center
2001 -	Physician Health and Well-Being Committee UMass Memorial Medical Center
2001 -	Educational Policy Committee University of Massachusetts Medical School
2008 -	Ethics Committee University of Massachusetts Medical School

NATIONAL:

1999 -2002	Subcommittee on Anesthetic Action and Biochemistry American Society of Anesthesiologists
2001 -	Subcommittee on Drug Disposition American Society of Anesthesiologists

EDITORIAL BOARD MEMBERSHIPS:

2000 -	International Anesthesiology Clinics
2008 -	AccessAnesthesiology (Editor-in-Chief)

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ORIGINAL REPORTS:

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2. Novak RF, Dershwitz M, Novak FC. Characterization of the interaction of the aromatic hydrocarbons benzene and toluene with human hemoglobin. **Mol. Pharmacol.** 1979; 16:1046-58.

3. Dershwitz M, Novak RF. Lack of inhibition of glutathione reductase by unnitrated derivatives of nitrofurantoin. **Biochem. Biophys. Res. Commun.** 1980; 92:1313-19.

4. Dershwitz M, Novak RF. Lack of inhibition of glutathione reductase by anthracycline antibiotics. **Biochem. Pharmacol.** 1981; 30:676-8.

5. Dershwitz M, Novak RF. Generation of superoxide anion via the interaction of nitrofurantoin with human hemoglobin. **J. Biol. Chem.** 1982; 257:75-9.

6. Dershwitz M, Novak RF. Studies on the mechanism of nitrofurantoin-mediated red cell toxicity. **J. Pharm. Exp. Ther.** 1982; 222:430-4.

7. Dershwitz M, Ts'ao CH, Novak RF. Metabolic and morphologic effects of the antimicrobial agent nitrofurantoin on human erythrocytes in vitro. **Biochem. Pharmacol.** 1985; 34:1963-70.

8. Dershwitz M, Sréter FA, Ryan JF. Ketamine does not trigger malignant hyperthermia in susceptible swine. **Anesth. Analg.** 1989; 69:501-3.

9. Dershwitz M, Ryan JF, Guralnick W. Safety of amide local anesthetics in patients susceptible to malignant hyperthermia. **J. Am. Dent. Assoc.** 1989; 118:276-80.

10. Dershwitz M, Sréter FA. Azumolene reverses episodes of malignant hyperthermia in susceptible swine. **Anesth. Analg.** 1990; 70:253-5.

11. Dershwitz M, Rosow CE, Di Biase PM, Zaslavsky A. Comparison of the sedative effects of butorphanol and midazolam. **Anesthesiology** 1991; 74:717-24.

12. Dershwitz M, Sherman EP. Acute myocardial infarction symptoms masked by epidural morphine? **J. Clin. Anesth.** 1991; 3:146-8.

13. Dershwitz M, Rosow CE, Di Biase PM, Joslyn AF, Sanderson PE. Ondansetron is effective in decreasing postoperative nausea and vomiting. **Clin. Pharmacol. Ther.** 1992; 52:96-101.

14. Dershwitz M, Di Biase PM, Rosow CE, Wilson RS, Sanderson PE, Joslyn AF. Ondansetron does not affect alfentanil-induced ventilatory depression or sedation. **Anesthesiology** 1992; 77:447-52.

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16. Dershwitz M, Randel GI, Rosow CE, Fragen RJ, Connors PM, Librojo ES, Shaw DL, Peng AW, Jamerson BD. Initial clinical experience with remifentanil, a new opioid metabolized by esterases. **Anesth. Analg.** 1995; 81:619-23.

17. Dershwitz M, Hoke JF, Rosow CE, Michałowski P, Connors PM, Muir KT, Dienstag JL. Pharmacokinetics and pharmacodynamics of remifentanil in volunteer subjects with severe liver disease. **Anesthesiology** 1996; 84:812-20.

18. Dershwitz M, Rosow CE. The pharmacokinetics and pharmacodynamics of remifentanil in volunteers with severe hepatic or renal dysfunction. **J. Clin. Anesth.** 1996; 8:88S-90S.

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20. Hoke JF, Shlugman D, Dershwitz M, Michałowski P, Malthouse-Dufore S, Connors PM, Marten D, Rosow CE, Muir KT, Rubin N, Glass PSA. Pharmacokinetics and pharmacodynamics of remifentanil in subjects with renal failure compared to healthy volunteers. **Anesthesiology** 1997; 87:533-41.

21. Gan TJ, Glass PS, Windsor A, Payne F, Rosow C, Sebel P, Manberg P, BIS Utility Study Group. Bispectral index monitoring allows faster emergence and improved recovery from propofol, alfentanil, and nitrous oxide anesthesia. **Anesthesiology** 1997; 87:808-15.

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24. Philip BK, Pearman MH, Kovac AL, Chelly JE, Wetchler BV, McKenzie R, Monk TG, Dershwitz M, Mingus M, Sung YF, Hahne WF, Brown RA, Dolasetron PONV Prevention Study Group. Dolasetron for the prevention of postoperative nausea and vomiting following outpatient surgery with general anaesthesia: a randomized, placebo-controlled study. **Eur J Anaesthesiol** 2000; 17:23-32.

25. Philip BK, McLeskey CH, Chelly JE, McKenzie R, Kovac AL, Diemunsch P, DuBois DM, Dolasetron Prophylaxis Study Group. Pooled analysis of three large clinical trials to determine the optimal dose of dolasetron mesylate needed to prevent postoperative nausea and vomiting. **J Clin Anesth** 2000; 12:1-8. (erratum published in **J Clin Anesth** 2000; 12:577-78).

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27. Dershwitz M, Michałowski P, Chang YC, Rosow CE, Conlay LA. Postoperative nausea and vomiting following total intravenous anesthesia with propofol and remifentanil or alfentanil. How important is the opioid? **J Clin Anesth** 2002; 14:275-78.

28. Dershwitz M. Droperidol: should the black box be light gray? **J Clin Anesth** 2002; 14:598-603.

29. Dershwitz M. There should be a threshold dose for the FDA black-box warning on droperidol (letter). **Anesth Analg** 2003; 97:1542-3.

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PROCEEDINGS OF MEETINGS:

1. Kharasch ED, Dershwitz M, Novak RF. Differential hemeprotein involvement in microsomal and red cell lysate quinone and nitro group reduction. In: Sato R, Kato R, eds. **Microsomes, Drug Oxidations, and Drug Toxicity**. New York: Wiley Interscience, 1982:237-8.

BOOKS:

1. Stelmack TR, Dershwitz M. **Manual for the Use of Pharmaceutical Agents for Ocular Diagnostic Purposes,** ICO Press, Chicago, 1980.

2. Dershwitz M, ed. **The MGH Board Review of Anesthesiology.** 4th ed. Norwalk, CT: Appleton & Lange, 1994.

3. Dershwitz M, ed. **The MGH Board Review of Anesthesiology.** 5th ed. Norwalk, CT: Appleton & Lange, 1998.

4. Dershwitz M, Walz JM, eds. **McGraw-Hill Specialty Board Review: Anesthesiology.** 6th ed. New York: McGraw-Hill, 2006.

CHAPTERS IN BOOKS:

1. Dershwitz M, Ten Eick RE. Pharmacology. In: **National Boards Examination Review for Part I, Basic Sciences**. Garden City, NY: Medical Examination Publishing Co., 1981.

2. Dershwitz M. Pharmacology. In: **National Boards Examination Review for Part I, Basic Sciences**. New Hyde Park, NY: Medical Examination Publishing Co., 1984.

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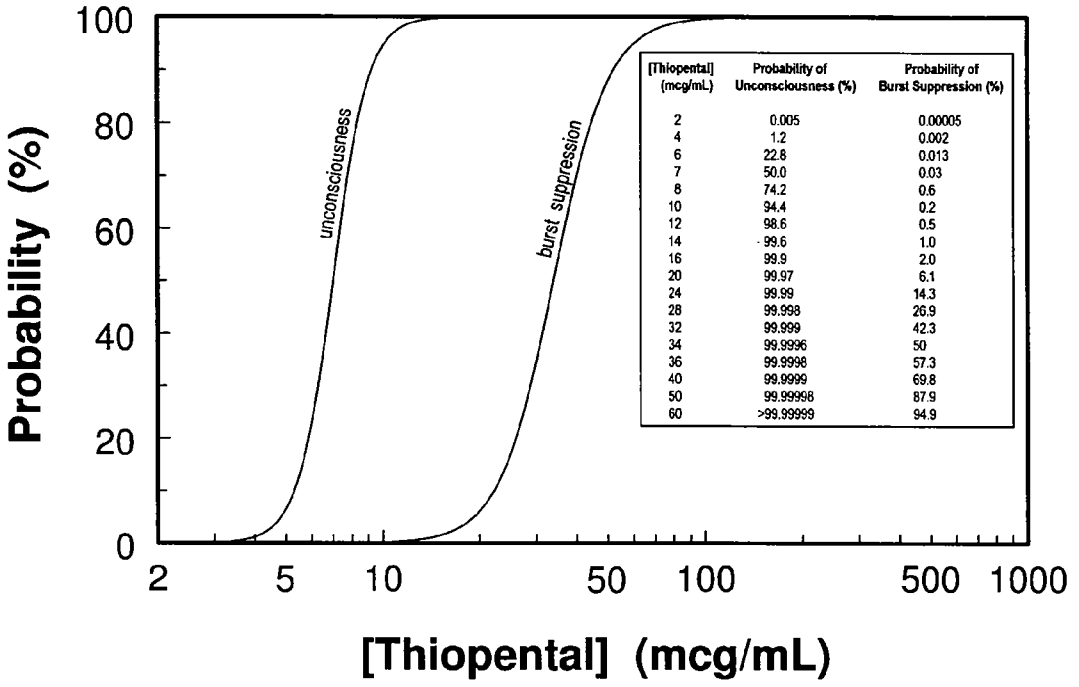
EXHIBIT B



[Thiopental] (mcg/mL)	Probability of Unconsciousness (%)	Probability of Burst Suppression (%)
2	0.005	0.00005
4	1.2	0.002
6	22.8	0.013
7	50.0	0.03
8	74.2	0.6
10	94.4	0.2
12	98.6	0.5
14	99.6	1.0
16	99.9	2.0
20	99.97	6.1
24	99.99	14.3
28	99.998	26.9
32	99.999	42.3
34	99.9996	50
36	99.9998	57.3
40	99.9999	69.8
50	99.99998	87.9
60	>99.99999	94.9

EXHIBIT C

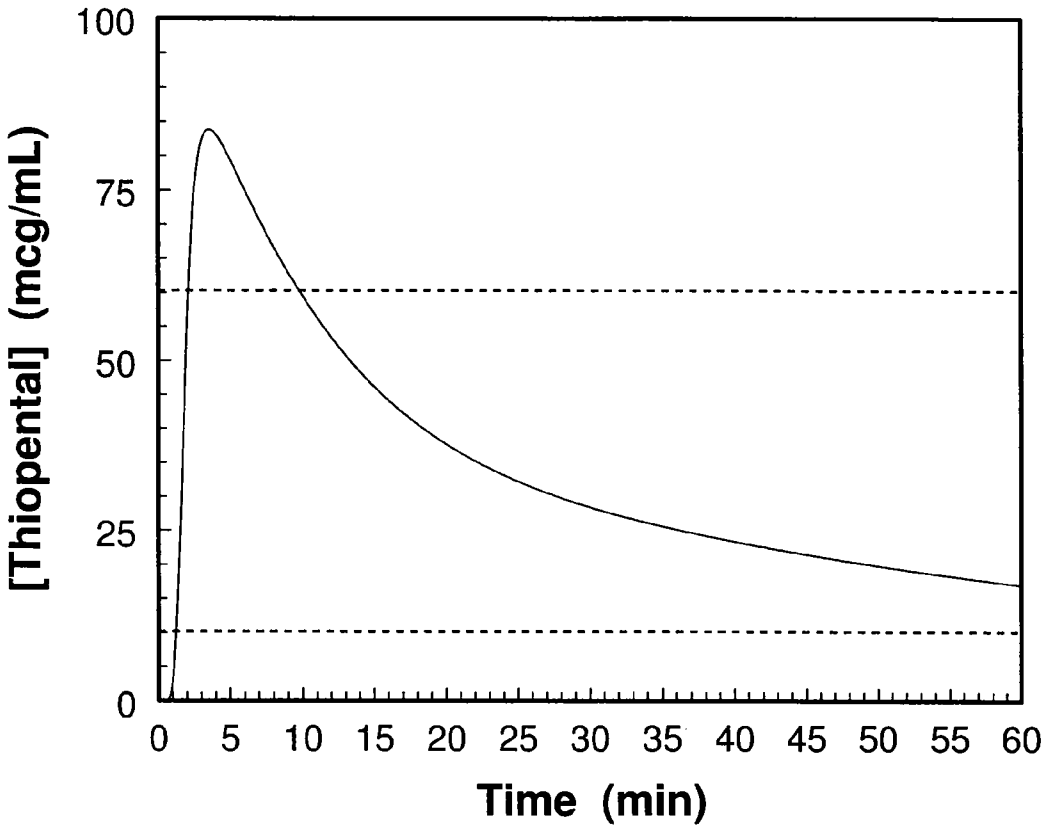

100
75
50
25
0
[Thiopental] (mcg/mL)
0 5 10 15 20 25 30 35 40 45 50 55 60
Time (min)

Exhibit D

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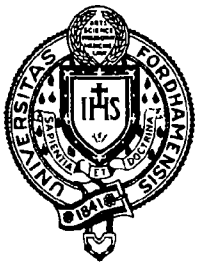

Edited by the Students of the Fordham University School of Law

THE PHARMACOKINETICS AND PHARMACODYNAMICS OF THIOPENTAL AS USED IN LETHAL INJECTION

Mark Dershwitz, M.D., Ph.D. & Thomas K. Henthorn, M.D.***

Thiopental (sometimes called, although inaccurately, Sodium Pentothal) was the most commonly used intravenous anesthetic agent for about fifty years, beginning in the mid-1940s.[1] As states began to discuss and develop protocols for lethal injection in the 1970s, thiopental was the logical choice as the medication to render the inmate unconscious prior to the administration of subsequent medications, most commonly pancuronium (a medication that paralyzes skeletal muscle and results in cessation of breathing) followed by potassium chloride (a salt that is a necessary component of the diet but when given intravenously in large doses results in the cessation of electrical activity in the heart).

It is virtually unanimously accepted by physicians, particularly anesthesiologists, that the administration of lethal doses of pancuronium and/or potassium chloride to a conscious person would result in extreme suffering. For this reason, all of the protocols for lethal injection that we have reviewed precede the administration of pancuronium and potassium chloride with a dose of thiopental intended to render the inmate unconscious for a period of time far in excess of that necessary to complete the execution.[2] When implemented as written, meaning the correct doses of the correct medications are administered in the correct order into a properly functioning intravenous delivery system and with sufficient time for thiopental to produce its effect, all of the protocols we have reviewed are intended to result in the rapid death of the inmate without undue pain or suffering.

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1. *See* A.S. Evers et al., *General Anesthetics*, *in* GOODMAN & GILMAN'S THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 341, 342 (Laurence L. Brunton et al. eds., McGraw-Hill, 11th ed. 2006).

2. One or both of the authors has reviewed the protocols used by Alabama, Arkansas, California, Delaware, Florida, Georgia, Kentucky, Maryland, Missouri, Montana, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and the federal government.

This paper will concentrate on the pharmacokinetics and pharmacodynamics of thiopental. As applied here, pharmacokinetics is the study of the concentration of thiopental as a function of time in tissues (particularly brain), while pharmacodynamics is the study of the effects of thiopental (particularly the production of unconsciousness and impairment of the heart's ability to circulate blood).[3] By using generally accepted computer modeling techniques, and considering the wealth of published studies on the pharmacology of thiopental, we can prepare predictions of such relevant parameters as the onset (how long it takes for the inmate to become unconscious) and duration (how long the inmate would remain unconscious) of the pharmacological effects of thiopental.[4]

Thiopental is usually described as an "ultra-short acting" sedative/hypnotic agent in pharmacology and anesthesiology texts.[5] This description is semantically correct, but only when thiopental is compared to other barbiturates. Indeed, when thiopental was used to induce (i.e., begin) a general anesthetic, the typical adult dose was about 300 mg and the typical patient would remain unconscious for 5 to 10 minutes.[6] The usual anesthetic regimen would involve the subsequent administration of anesthetic gases that would keep the patient unconscious for the duration of the surgical procedure. The protocols for lethal injection mandate doses of thiopental ranging from 2000 to 5000 mg, i.e., about seven to sixteen times higher than those used to begin a typical anesthetic.[7] However, the relationship between the dose of thiopental and its duration of action is *not* linear. For example, as the dose of thio-

3. K.B. Johnson & Talmage D. Egan, *Principles of Pharmacokinetics and Pharmacodynamics: Applied Clinical Pharmacology for the Practitioner*, *in* ANESTHESIOLOGY 821, 821 (D.E. Longnecker et al. eds., McGraw-Hill 3d ed. 2008).

4. *See generally* Colin A. Shanks et al., *A Pharmacokinetic-Pharmacodynamic Model for Quantal Responses with Thiopental*, 21 J. PHARMACOKINETICS & BIOPHARMACODYNAMICS 309, 309-21 (1993) (providing the pharmacokinetic model for thiopental and the pharmacodynamic model for burst suppression); *see also* Robert J. Telford et al., *Fentanyl does not Alter the "Sleep" Plasma Concentration of Thiopental*, 75 ANESTHESIA & ANALGESIA 523, 523-29 (1993) (providing the pharmacodynamic model for unconsciousness).

5. Thiopental is "ultra-short acting" only in comparison to the barbiturates that are classified as "short-acting," "intermediate-acting," and "long-acting." This differentiation is primarily of historical interest. *See, e.g.*, LOUIS S. GOODMAN & ALFRED GILMAN, THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 138 (Macmillan Co., 2d ed. 1955).

6. Mark Dershwitz & C.E. Rosow, *Intravenous Anesthetics*, *in* ANESTHESIOLOGY, *supra* note 3, at 849, 856. R

7. *See supra* note 2 for the list of states whose protocols the authors have reviewed. R

pental is increased sevenfold to 2000 mg, the duration of unconsciousness is *not* also increased sevenfold but actually much more, as described later. The pharmacological term "sedative/hypnotic" means that at low doses (e.g. 25 - 100 mg), thiopental causes sedation (i.e., sleepiness), while at higher doses it produces hypnosis (i.e., unconsciousness).[8] At sedative doses, it produces no analgesia (pain relief) and in fact probably increases the perception of painful stimuli. When a person is rendered unconscious by thiopental, the conscious perception of pain is abolished. The body may, however, react in a reflex manner to pain and exhibit such phenomena as movement, a fast heart rate, sweating, or tearing. Additionally, the state of consciousness produced by a drug is also affected by the strength of applied stimuli. Thus, at the threshold of unconsciousness pain may reverse the state and produce consciousness, making it difficult to distinguish between reflex responses to pain and conscious response. Therefore, it has been argued by some that deep unconsciousness, as defined by burst suppression on the electroencephalogram ("EEG"), be the level of unconsciousness produced in lethal injection.[9]

We will present models to describe the onset and duration of unconsciousness as a function of the dose of thiopental. For example, with the administration of 2000 mg of thiopental to an 80-kg person, loss of consciousness will occur within approximately 1.0 to 1.5 minutes, while duration of unconsciousness will last approximately two hours. The time for onset of burst suppression in the same individual would be approximately 1.5 to 2.5 minutes and would reliably last only seven minutes. Larger doses of thiopental will be shown to result in further prolongation of the duration of unconsciousness and burst suppression.

There is an enormous body of anesthesiology literature supporting the use of mathematical modeling of the pharmacokinetic and pharmacodynamic behavior of intravenous anesthetic agents like thiopental.[10] Such modeling underlies the commonly utilized tech-

8. Dershwitz & Rosow, *Intravenous Anesthetics*, *supra* note 6, at 850. R

9. *See* Testimony of Thomas K. Henthorn, Taylor vs. Crawford et al., No. 05-4173-CV-S-FJG, 2006 WL 1779035, slip op at *7 (W.D. Mo. June 26, 2006).

10. *See, e.g.*, such comprehensive review articles and book chapters as: Dershwitz & Rosow, *supra* note 6, at 849-68; J. Sear, *Total Intravenous Anesthesia*, *in* ANESTHESIOLOGY, *supra* note 3, at 897, 897-917; Thomas K. Henthorn, *The Effect of Altered Physiological States on Intravenous Anesthetics*, 182 HANDB. EXP. PHARMACOL. 363, 363-77 (2008); Thomas K. Henthorn, *Recirculatory Pharmacokinetics: Which Covariates Affect the Pharmacokinetics of Intravenous Agents?*, 523 ADV. EXP. MED. BIOL. 27, 27-33 (2003); Harmut Derendorf et al., *Pharmacokinetic/Pharmacodynamic Modeling in Drug research and Development*, 40 J. CLIN. PHARMACOL. 1399, 1399- R R

nique of target-controlled intravenous drug infusions. Mathematical modeling of intravenous anesthetics has been extensively studied and has been validated in the real world practice of target-controlled infusions ("TCI").[11] TCI couples a small computer with an infusion pump so that multi-compartment models are used to predict and adjust anesthetic drug infusion rates on a second-by-second basis to reach and maintain plasma concentrations determined by the practitioner.[12] TCI devices are in common use in anesthetic practice worldwide. Median absolute performance errors for TCI of predicted versus actual drug concentrations are in the range of ±30% when literature values for pharmacokinetic parameters are used to drive the TCI device.[13] Therefore, similar errors can be expected when applying the simulations presented here to any given individual. Thus the methodology employed in performing the pharmacological simulations employed herein has undergone peer review and its application to the actual practice of anesthesia is well studied.

I. THE ONSET TIMES FOR THIOPENTAL ADMINISTERED AT VARIOUS RATES

No drug, including thiopental, has an effect the moment it is injected. It must first be transported by circulating blood to the site of action, i.e., the brain in the case of thiopental. The drug must then cross the blood-brain barrier to reach drug receptors in the neural cells of the brain. The drug-receptor interaction then triggers a cellular response resulting in the drug effect. As thiopental concentrations at the site of action continue to rise, more intense drug responses are seen. The interval between injecting the drug, and seeing an effect, i.e. the process of accumulating adequate drug concentrations in the blood and subsequently the brain, is called hysteresis.[14] A good way to think about hysteresis is to compare it to using a stove. Turning the flame on is akin to injecting the drug; transporting the heat to the surface of the pan is analogous to the

1418 (2000); D.R. Stanski, *Pharmacodynamic Modeling of Anesthetic EEG Drug Effects*, 32 ANNU. REV. PHARMACOL. TOXICOL. 423, 423-47 (1992).

11. *See* Talmage D. Egan, *Target-Controlled Drug Delivery: Progress Toward an Intravenous "Vaporizer" and Automated Anesthetic Administration*, 99 ANESTHESIOLOGY 1214, 1215 (2003).

12. *Id.*

13. *See id.* at 1216-17; *see also* Robert A.Veselis et al., *Performance of Computer-Assisted Continuous Infusion at Low Concentrations of Intravenous Sedatives*, 84 ANESTHESIA & ANALGESIA 1049, 1053-57 (1997).

14. Johnson & Egan, *supra* note 3, at 825. R

circulation delivering the drug to the site of action; and cooking the food in the pan is akin to producing the drug effect. Your dinner can range from undercooked to well done, depending on how long it's exposed to the flame "dose" the stove is delivering. Similarly the heating effect continues for some time even after the flame is turned off. Therefore, with hysteresis it is possible to have the same effect at two different plasma drug concentrations just as it is possible for a pan to be at the same temperature at two different flame settings, once during heating and again during cooling. Pharmacokinetic-pharmacodynamic modeling is able to mathematically describe this hysteresis and fully explain how the same blood drug concentration can produce variable effects.[15]

In a lethal injection setting, once an injection of thiopental has begun, the drug must pass through the IV tubing from the "injection room" to the "death chamber" before reaching the vein of the condemned inmate. For instance, if the tubing is ten feet long with a typical tubing volume of 1.8 mL/foot, then the total volume is 18 mL. Assuming fluid traveling in a tube as a perfect cylinder and an injection speed of 2 mL/sec, it would take a full 9 seconds for the drug to reach the vein.

After entering the bloodstream the drug must circulate with the blood to reach the brain before concentrations at the site of effect can begin to rise. Depending on where the intravenous catheter is placed in the inmate, it could take up to 15 seconds for the drug to reach the right-sided chambers of the heart and thus be considered within the central circulation where the flow of blood is at its greatest. From the right side of the heart, the blood flows through the pulmonary arteries to the capillaries of lungs, recollects in the pulmonary veins and flows back to the left side of the heart. The powerful left ventricle of the heart then pumps the blood out through the aortic arch into all of the arteries of the body, including the carotid and vertebral arteries leading to the brain.

The principles governing the time required for an injected drug to pass through IV tubing to reach the vein also apply to the drug within the bloodstream. That is, the time elapsed is directly related to the volume of the system and the flow rate of the fluid in the system. The volume of the central circulation as a percentage of the body's total blood volume is near maximum when lying flat, approximately one third of the total blood volume or 1.7 L for the typical male inmate. It would be higher tilted head down and

15. *See generally id.* at 825.

lower when standing. In a sedated adult it would be reasonable to assume a total blood flow (or cardiac output) of 5 L/min. Thus the time required for drug just arriving in the right side of the heart to pass through the central circulation to reach the brain would be 1.7 L divided by 5 L/min, which is approximately 20 seconds.

Adding the 15 seconds for venous transit (times vary greatly with the distance from the heart and the flow in the particular vein selected for the intravenous catheter) to the 20 seconds for central circulation transit, one can appreciate the concept of arm-brain circulation time, which is empirically spoken of among anesthesiologists as being approximately one-half minute. Again, there will be an additional 9 seconds or so added to time required to see the initial thiopental response due to the very long length of intravenous tubing leading from the "injection room" to the "death chamber."

In the fluid medium of the body, drug diffuses from areas of high concentration to adjacent areas where the concentration is lower. During the onset of effect, thiopental diffuses from the blood where the concentrations become quite high, after the initial 35 seconds required for transit, into the brain where the thiopental concentration starts at zero. Without continued thiopental administration, diffusion continues in this direction for approximately 2.5 minutes, at which time blood and brain concentrations are momentarily equal. Then diffusion reverses direction and the drug begins to move from the brain back into the blood. Brain concentrations will continue to fall at a rate governed by the decrease in blood concentrations since brain concentrations will never fall below those of the blood during this phase. Figure 1 depicts the probability of unconsciousness or burst suppression as a function of the brain concentration of thiopental.

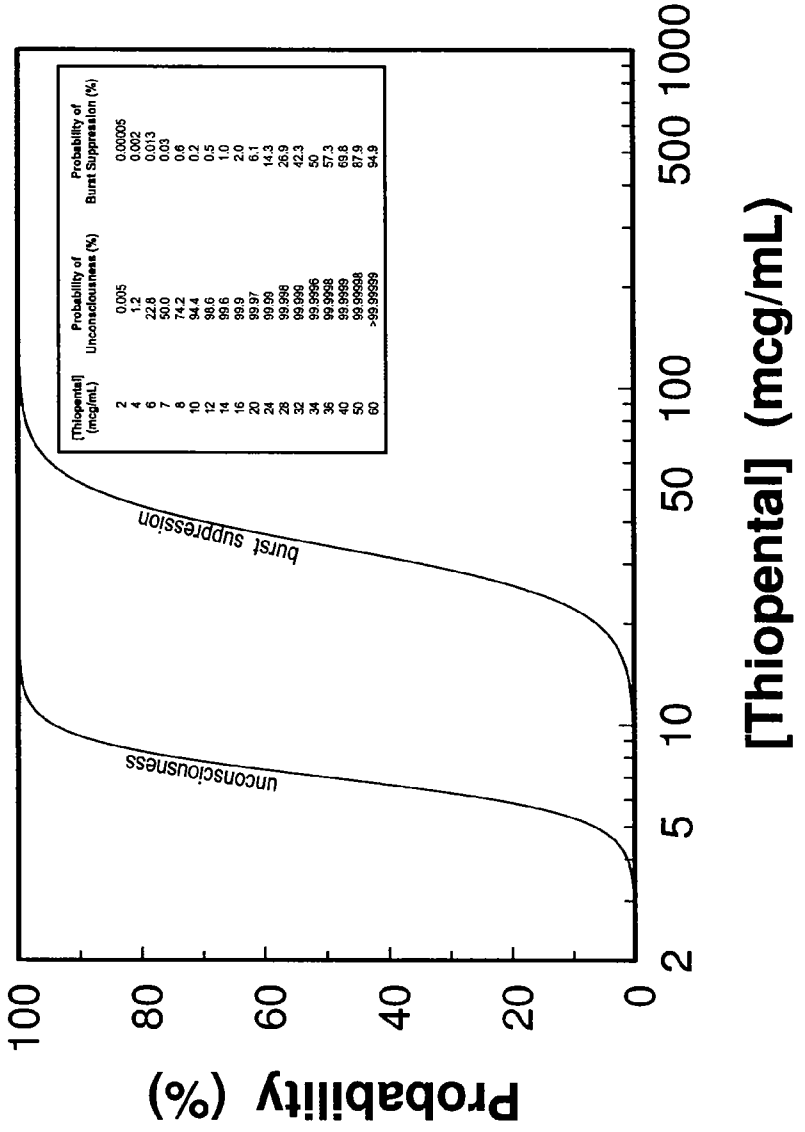


Figure 1: The probability that a person will experience unconsciousness or burst suppression on the EEG as a function of the brain concentration of thiopental. Note that the x-axis is shown as a logarithmic scale for clarity.[16]

16. *See, e.g., supra* note 4 and accompanying text.

R

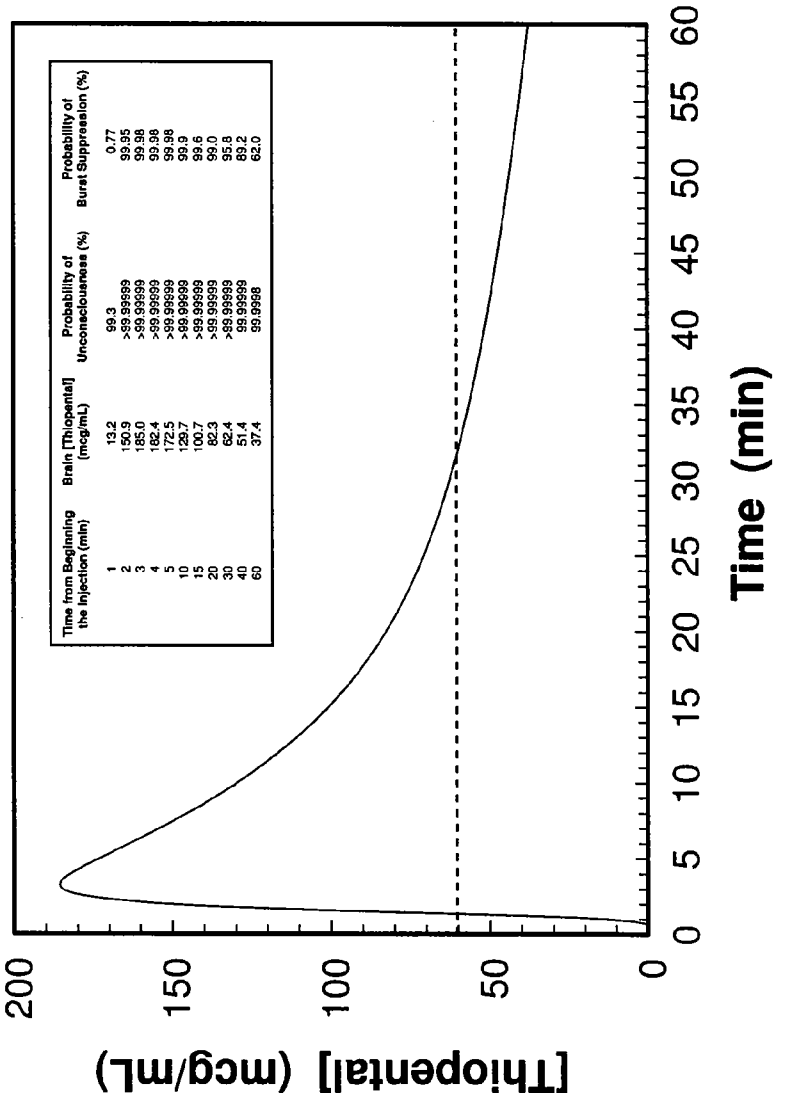


Figure 2: The predicted brain concentration of thiopental following the administration of a dose of 5000 mg given at a rate of 167 mg/sec to an average 80-kg person. The dashed line indicates the brain concentration above which 95% of persons will experience burst suppression on the EEG.[17]

17. *See* Dershwitz & Rosow, *supra* note 6, at 850.

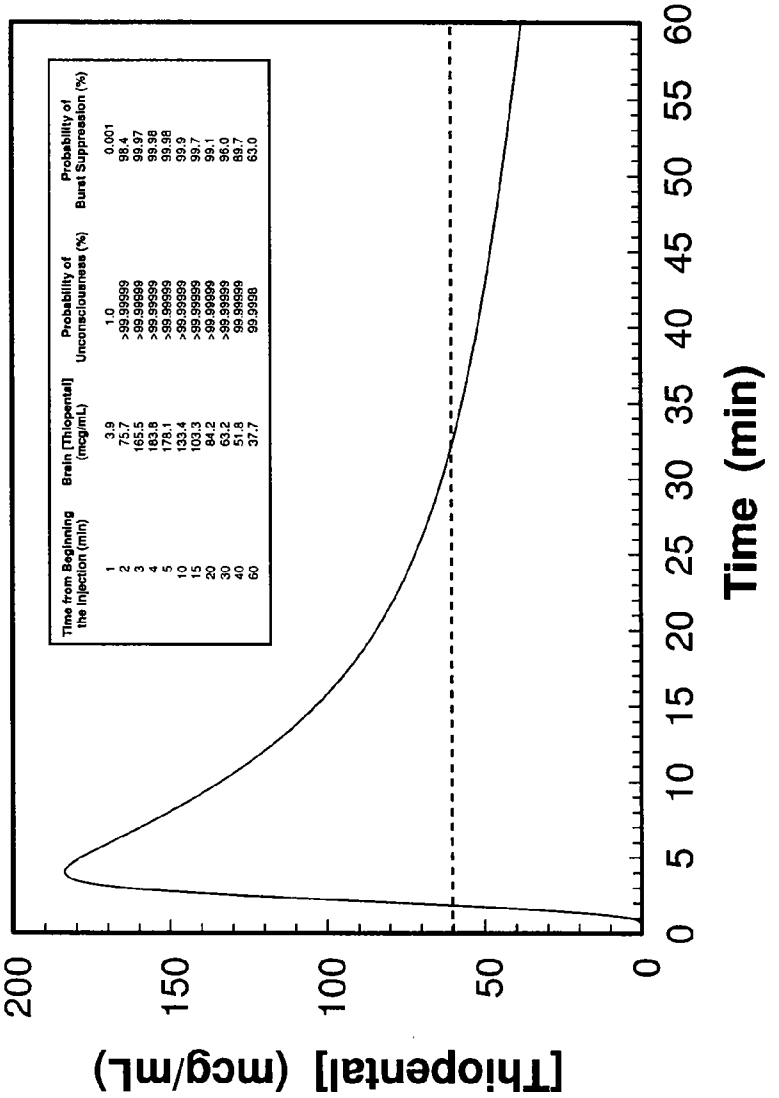


Figure 3: The predicted brain concentration of thiopental following the administration of a dose of 5000 mg given at a rate of 50 mg/sec to an average 80-kg person. The dashed line indicates the brain concentration above which 95% of persons will experience burst suppression on the EEG.[18]

18. The pharmacodynamic model for unconsciousness is in Telford et al., *supra* note 4, at 523-29. See Shanks et al., *supra* note 4, at 309-21 for the pharmacodynamic model for burst suppression. R

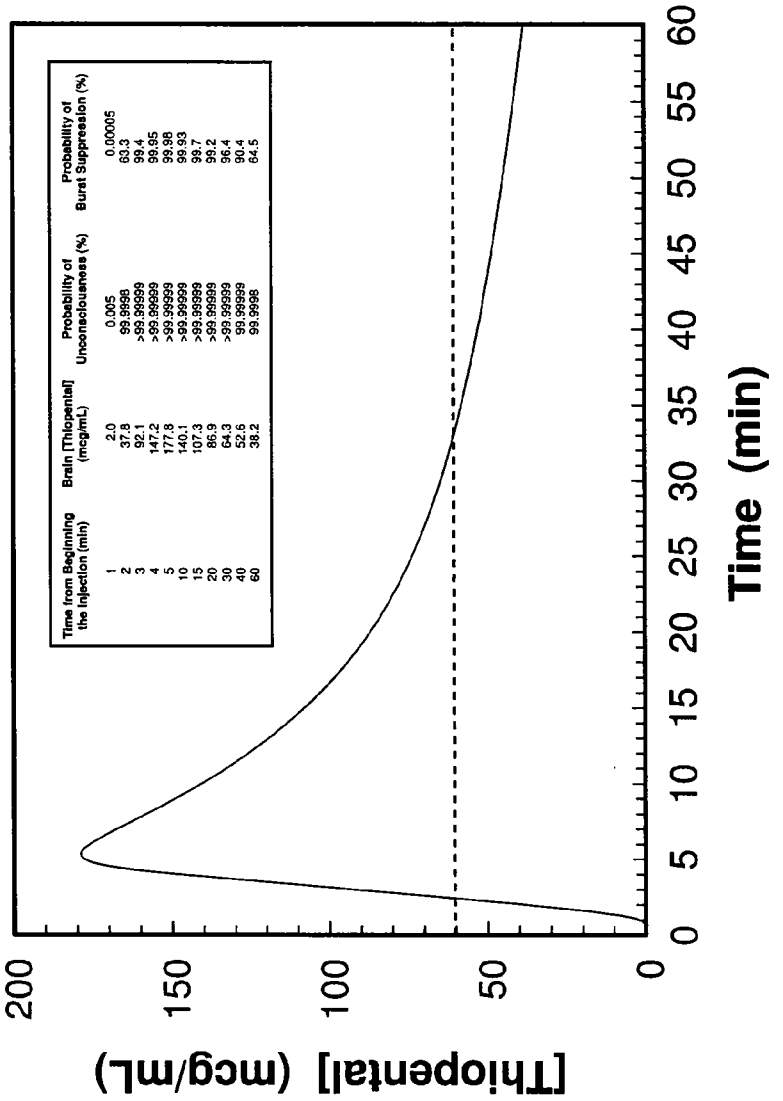


Figure 4: The predicted brain concentration of thiopental following the administration of a dose of 5000 mg given at a rate of 25 mg/sec to an average 80-kg person. The dashed line indicates the brain concentration above which 95% of persons will experience burst suppression on the EEG.[19]

19. The pharmacokinetic model for thiopental used in Figures 2-8 is in Shanks et al., *supra* note 4, at 309-21.

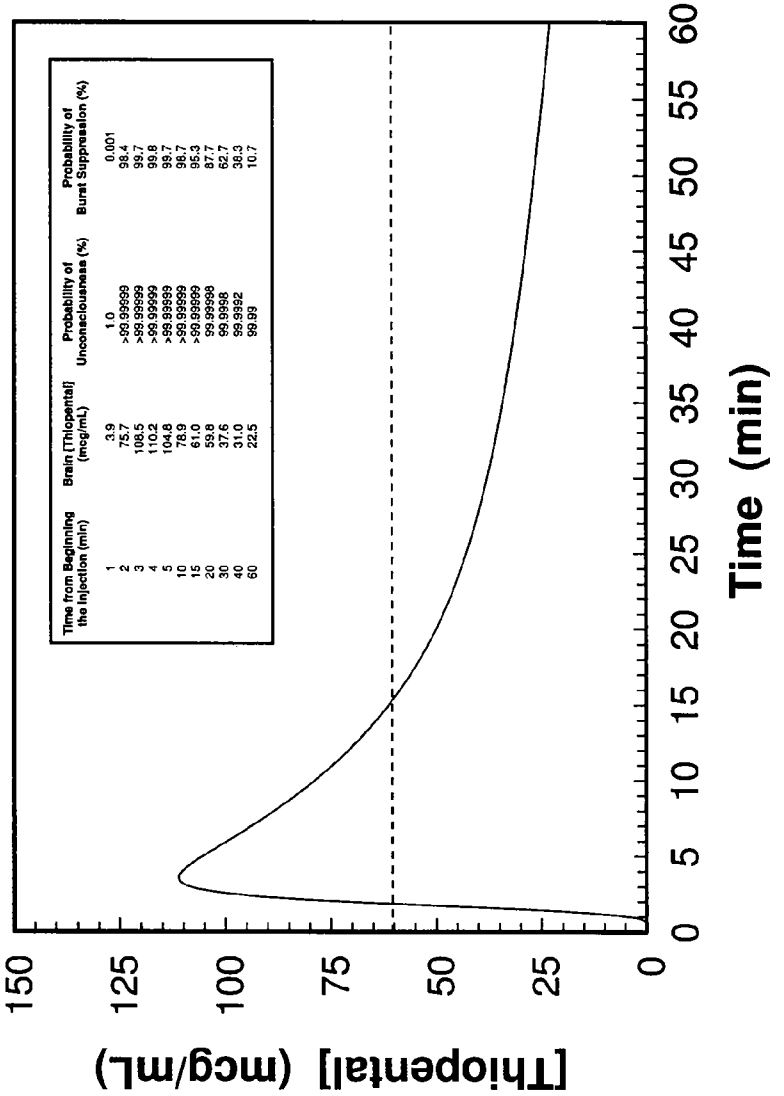


Figure 5: The predicted brain concentration of thiopental following the administration of a dose of 3000 mg given at a rate of 50 mg/sec to an average 80-kg person. The dashed line indicates the brain concentration above which 95% of persons will experience burst suppression on the EEG.[20]

20. *See id.*

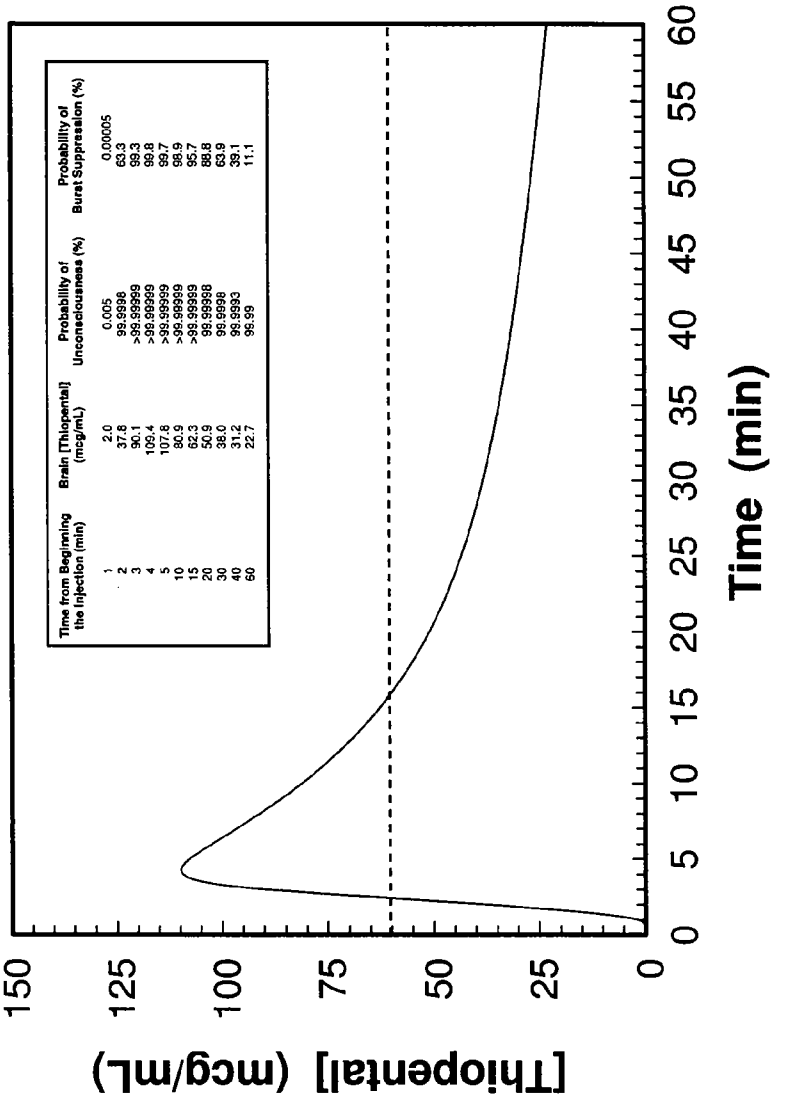


Figure 6: The predicted brain concentration of thiopental following the administration of a dose of 3000 mg given at a rate of 25 mg/sec to an average 80-kg person. The dashed line indicates the brain concentration above which 95% of persons will experience burst suppression on the EEG.[21]

21. *See id.*

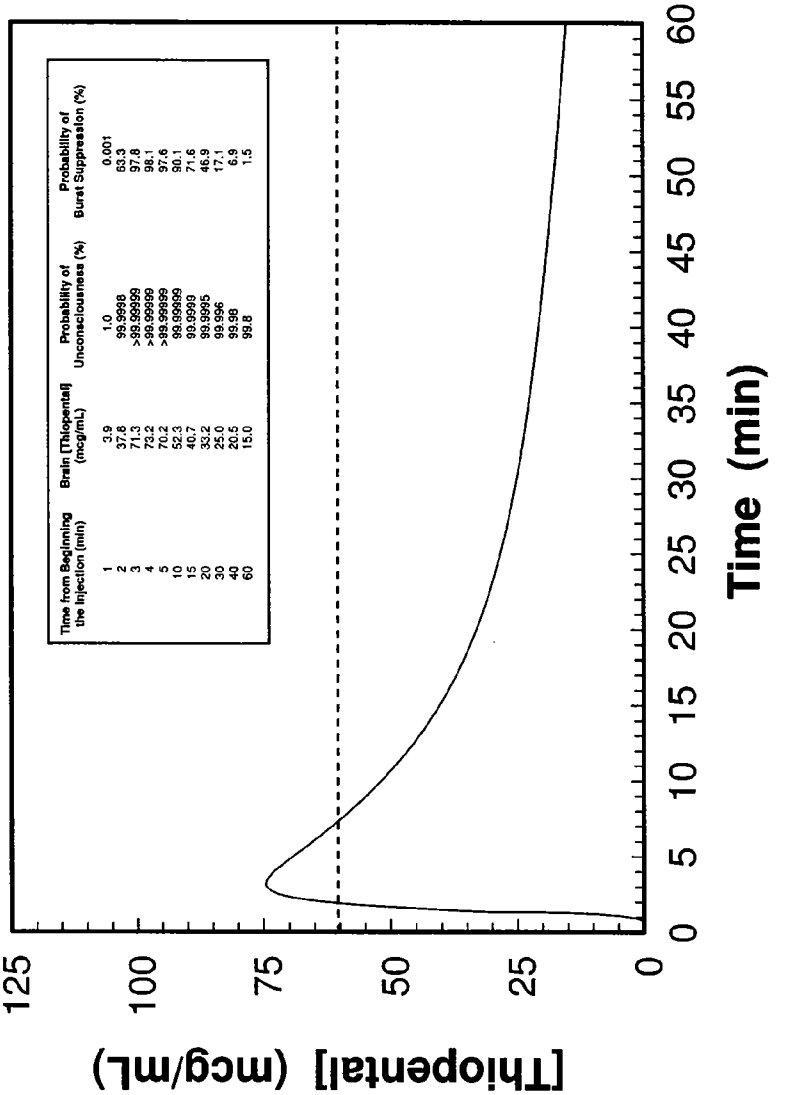


Figure 7: The predicted brain concentration of thiopental following the administration of a dose of 2000 mg given at a rate of 50 mg/sec to an average 80-kg person. The dashed line indicates the brain concentration above which 95% of persons will experience burst suppression on the EEG.[22]

22. *See id.*

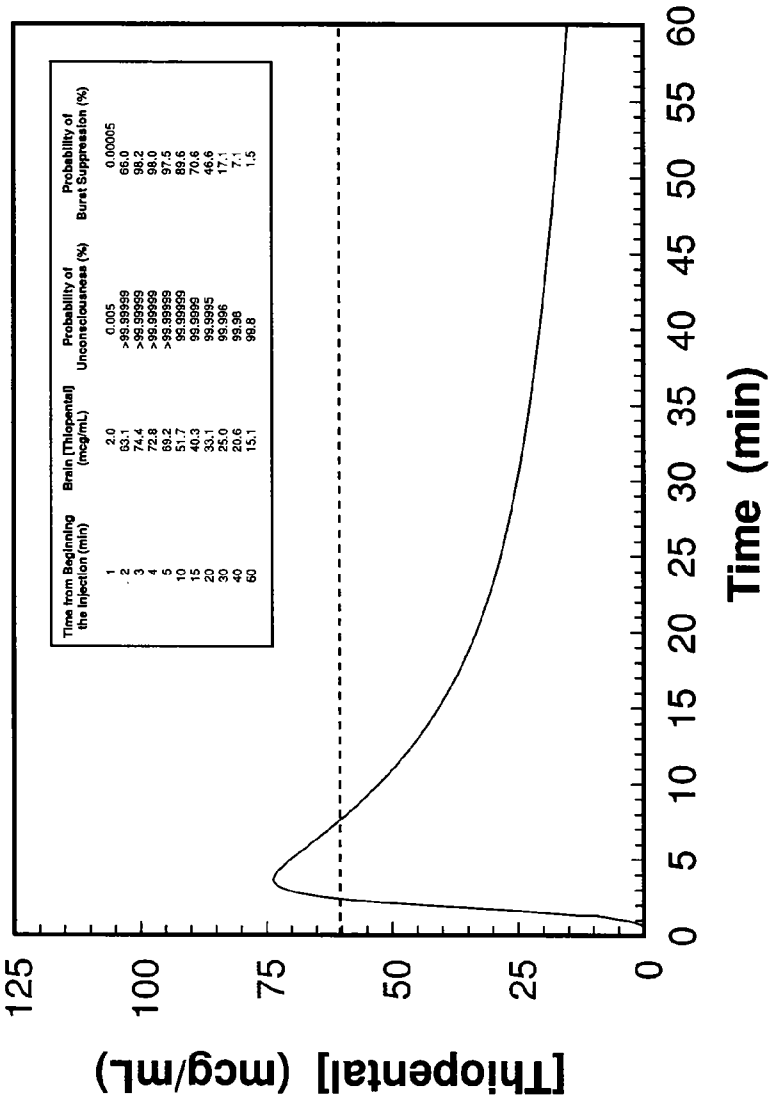


Figure 8: The predicted brain concentration of thiopental following the administration of a dose of 2000 mg given at a rate of 25 mg/sec to an average 80-kg person. The dashed line indicates the brain concentration above which 95% of persons will experience burst suppression on the EEG.[23]

23. *See id.*

Injection Rate (mg/sec)	Time to 95% probability of unconsciousness (min, normal C.O.)	Time to 95% probability of burst suppression (min, normal C.O.)	Time to 95% probability of unconsciousness (min, C.O. ↓ by 75%)	Time to 95% probability of burst suppression (min, C.O. ↓ by 75%)
25	1.6	2.6	2.3	3.1
50	1.4	2.1	2.0	2.7
167	1.1	1.5	1.8	2.2

These principles along with published data regarding the timing of drug onset can be used to construct models to simulate the onset of thiopental effect from any given dose or injection speed.[24] Figures 2 to 8 depict the onset of thiopental effect to the endpoints of unconsciousness and burst suppression for 2000 mg, 3000 mg, and 5000 mg doses at varying injection speeds. Since the onset of effect is rate-limited by blood circulation and diffusion, injection speed matters little. The table above shows the times required, from the beginning of the injection process, to reach a 95% probability of unconsciousness or burst suppression as a function of the injection rate for a 5000-mg dose. The standard solution of thiopental as used clinically is a 2.5% solution, or 25 mg/mL.[25] Therefore, injecting this solution at a rate of 1 mL/sec or 2 mL/sec yields injection rates of 25 mg/sec and 50 mg/sec, respectively. An injection rate of 167 mg/sec (6.7 mL/sec) is achieved by administering a 5000-mg dose over 30 seconds.

Since a 5000-mg dose of thiopental is expected to produce a substantial decrease in the cardiac output (C.O.),[26] the table also shows how the times to reach a 95% probability of unconsciousness or burst suppression are prolonged by a 75% decrease in cardiac output.

II. The Duration of Thiopental Following Various Doses

We shall now consider the *duration* of the effect of the thiopental once it has been administered. The duration of its action should exceed the amount of time required to administer the remaining

24. *See id.*
25. *See id.*
26. *See infra* notes 28-29 and accompanying text. R

medications as well as the time required for the potassium chloride to stop the inmate's heart and to cause his or her death.

The amount of time required to administer all of the medications will depend on the doses specified by the protocol as well as the speed of the injection (i.e. how rapidly the executioner injects each syringe) as well as allowing some time to change syringes by removing one from the intravenous tubing and replacing it with the next one. The following hypothetical three-drug protocol involves using doses at the high end of those used by the various states:

- thiopental, 5000 mg (25 mg/mL, 200 mL)
- saline flush, 50 mL
- pancuronium, 100 mg (1 mg/mL, 100 mL)
- saline flush, 50 mL
- potassium chloride, 240 mEq (2 mEq/mL, 120 mL)
- saline flush, 50 mL

The largest commercially-available syringes used in medicine are 60 mL. The above protocol therefore requires eleven syringes. Assuming ten seconds for each syringe change, the total time to change syringes is 100 seconds. Considering the size of the syringes used (it becomes harder to push the plunger of a syringe as its diameter increases) and the length of the intravenous tubing required to go from the "injection room" to the "death chamber," it is difficult to inject such syringes at a rate greater than 2 mL/sec (or 50 mg/sec when the standard 2.5% solution is used). On the other hand, there is no reason to inject more slowly than 1 mL/sec, so the total volume of the drugs and flushes as listed above, 570 mL, should require no more than approximately eleven minutes to inject.

The potassium chloride should cause cessation of cardiac electrical activity within two minutes of its injection (although see below for a discussion on the effects of thiopental on cardiac output). Therefore, a time period of fifteen minutes should be more than enough to complete an execution, from the beginning of the injection of the thiopental until cessation of electrical activity. Some states mandate a period of time, e.g. five minutes, of continuous electrical inactivity on the electrocardiogram ("ECG"), but that additional time does not need to be considered here.[27]

27. North Carolina, for example, requires such a five-minute period of electrical inactivity prior to the pronouncement of death. *See* North Carolina Department of Correction, Execution Method, http://www.doc.state.nc.us/dop/deathpenalty/method.htm (last visited Apr. 15, 2008).

Figures 2 through 4 depict the predicted concentration of thiopental in the brain following a dose of 5000 mg given at various rates of injection. Referring to Figures 2 to 4, it is apparent that fifteen minutes following the beginning of the thiopental injection, an average person will have essentially a 100% probability of being unconscious and having burst suppression on the EEG. These probabilities are not affected by the speed of the injection.

Figures 5 and 6 depict the predicted brain concentration of thiopental following a dose of 3000 mg given at a rate of 25 mg/sec (1 mL/sec) or 50 mg/sec (2 mL/sec). Fifteen minutes following the beginning of the thiopental injection, an average person will have essentially a 100% probability of being unconscious and about a 95% probability of having burst suppression on the EEG. These probabilities are not affected by the speed of the injection.

Figures 7 and 8 depict the predicted brain concentration of thiopental following a dose of 2000 mg given at a rate of 25 mg/sec (1 mL/sec) or 50 mg/sec (2 mL/sec). The 2000-mg dose of thiopental requires less time to inject than the 5000-mg dose (40 seconds vs. 100 seconds using an injection rate of 50 mg/sec). It will also have a lesser effect in decreasing cardiac output permitting the potassium chloride to circulate more quickly. With the 2000-mg dose, the time required to complete the injection and achieve cardiac arrest will be approximately 7 to 10 minutes with injection rates of 25-50 mg/sec and an additional two minutes to observe cardiac arrest on the ECG. At these time points, a person will have essentially a 100% probability of being unconscious, and a 90-95% probability of having burst suppression on the EEG.

III. OTHER EFFECTS OF THIOPENTAL

The aforementioned predictions of duration of unconsciousness are based upon the persons continuing to breathe (or have their breathing assisted as during surgery). The doses of thiopental used in lethal injection will cause most persons to stop breathing and to have their blood pressures substantially decreased.[28] Thus, even in the absence of the administration of pancuronium and/or potassium chloride, doses of thiopental of 2000 mg and above will be lethal in most persons due to the impairment of delivery of oxygen to critical organs such as the heart and brain. The largest dose of thiopental used in clinical medicine, about 3000 mg, is occasionally used for "brain protection" when there is the planned and deliber-

28. *See generally*, Dershwitz & Rosow, *supra* note 6, at 853. R

ate interruption of blood flow to the brain.[29] Such an interruption of blood flow may occur during certain brain surgeries to repair an aneurysm or arteriovenous malformation. During such surgical procedures, patients are mechanically ventilated so that the effect of thiopental on ventilation is not relevant. However, a dose of 3000 mg of thiopental will decrease the cardiac output and the blood pressure to a dramatic, and dangerous, degree. Such patients require the aggressive administration of medications to maintain adequate blood pressure and oxygen delivery to organs. While neither of us, nor any other physician we know, has ever given a 3000-mg dose of thiopental to a patient who was not mechanically ventilated nor had his or her circulation supported, it is difficult for us to imagine that the administration of 3000 mg of thiopental to an inmate, by itself, is survivable.

We are unaware of any indication in clinical medicine in which a 5000-mg dose of thiopental is given to an 80-kg patient. The negative cardiac effects of such a huge dose of thiopental are necessarily larger than those following a 3000-mg dose. In fact, there is circumstantial evidence that a 5000-mg dose of thiopental may have caused, in some inmates, virtual cessation of the circulation. California is one of the states that uses a 5000-mg dose of thiopental as well as an ECG to monitor the electrical activity of the heart. There have been several executions in California in which a second dose of potassium chloride was given, as mandated by the protocol, because cessation of electrical activity on the ECG did not occur after the first dose.[30] One possible explanation is that the potassium chloride was not injected through a working intravenous catheter. Another more plausible explanation is that the potassium chloride did not circulate to the heart from the site of the intravenous injection.

IV. ASSESSING THE PRESENCE OR ABSENCE OF CONSCIOUSNESS

As previously described, all of the lethal injection protocols that we have reviewed are intended to render the inmate unconscious prior to the administration of pancuronium and potassium chloride

29. *See* W.A. Kofke, *Protection of the Central Nervous System in Surgical Patients*, in ANESTHESIOLOGY, *supra* note 3, at 1939-40. R

30. For example, the execution log of Robert L. Massey, who was executed on March 27, 2001, indicates he was given a second dose of potassium chloride five minutes after the first dose failed to produce a flat ECG, and the execution log of Stephen Wayne Anderson who was executed on January 29, 2002, indicates he was given a second dose of potassium chloride four minutes after the first dose failed to produce a flat ECG.

and to maintain unconsciousness until death occurs.[31] The greatest risk to the inmate, in terms of the humaneness of an execution, is the administration of pancuronium and/or potassium chloride to an inmate who is conscious. Based upon the history of those executions that did not go as intended, the most frequent problem in such executions has been an intravenous catheter that was not actually within a vein.[32]

If the intravenous catheter was not positioned correctly from the beginning, all of the medications will be delivered to the subcutaneous tissues and the inmate will not lose consciousness as rapidly as expected. A less plausible, but still possible, scenario is one in which the thiopental is delivered subcutaneously but then the intravenous catheter begins functioning properly and the remaining medications are delivered intravenously. In such a scenario, the inmate could be conscious and experience the paralytic effects of pancuronium and the pain associated with the injection of potassium chloride.

Such a risk could be lessened if the inmate were demonstrated to be unconscious following the administration of thiopental and before the administration of the pancuronium and potassium chloride. This sort of assessment is mandated by some protocols and makes use of either a physical examination or an EEG monitor.[33]

Assessing the *depth* of anesthesia is a complex examination requiring both significant training and experience, which is obligatory in clinicians who administer anesthesia. Assessing the *presence of unconsciousness*, in contrast, is something many paramedical personnel do routinely. Such an examination typically involves the application of graded stimuli and the assessment of the response to:

- a spoken command (e.g. "open your eyes")
- a tactile reflex (e.g. gently stroking an eyelash)
- gentle shaking
- a noxious stimulus (e.g. a strong pinch)

31. *See supra* note 2 and accompanying text. R

32. The executions of Joseph Clark on May 2, 2006, in Ohio and of Angel Diaz on December 13, 2006, in Florida were characterized by prolonged periods following the administration of thiopental during which the inmates did not lose consciousness as would have been expected had the medication been introduced intravenously.

33. For example, the protocols used by Missouri and the federal government include an assessment of consciousness by physical examination. The protocol used by North Carolina employs a type of EEG monitor. *See, e.g.*, Connor v. N.C. Council of State, Nos. 07-GOV-0238, 07-GOV-0264 (N.C.O.A.H. Aug. 9, 2007) (describing North Carolina's lethal injection protocol).

The lack of any response to these graded stimuli is strong evidence that a person is indeed unconscious.

One state, North Carolina, uses the bispectral index ("BIS") monitor in its lethal injection protocol.[34] This is a type of EEG monitor commonly used by anesthesiologists to assess the depth of anesthesia and decrease the incidence of intraoperative awareness.[35] It involves placing an electrode array on the forehead and connecting these electrodes to the monitor. Although the monitor displays much neurophysiological information, the parameter of greatest interest is the bispectral index, or BIS. This is a dimensionless number that ranges from zero to 100.[36] Zero corresponds to complete electrical inactivity of the EEG (i.e. "flatline") while 100 corresponds to the completely awake state.[37] Many clinical studies have shown that a BIS value of 40-60 is associated with a clinically appropriate depth of anesthesia and a very low probability of intraoperative awareness.[38]

North Carolina has utilized the BIS monitor in several executions. The monitor is viewed by a nurse. The executioner pauses after the administration of thiopental (3000 mg in this state) and awaits a signal from the nurse before giving the pancuronium and potassium chloride. In each execution in which it has been used, the BIS value was 0-10 *before* the thiopental administration was complete.

V. POSTMORTEM DETERMINATION OF THIOPENTAL

Some states routinely perform autopsies on executed inmates and such autopsies may include drawing blood for the measurement of the thiopental concentration.[39] Unfortunately, in far too many of these autopsies the blood samples have been improperly

34. *See id.*; Brown v. Beck, 2006 U.S. Dist. LEXIS 60084, at *4 (E.D.N.C. Apr. 7, 2006).

35. *See* Paul S. Myles et al., *Bispectral Index Monitoring to Prevent Awareness During Anaesthesia: The B-Aware Randomised Controlled Trial*, 363 LANCET 1757, 1757 (2004); Y. Punjasawadwong et al., *Bispectral Index for Improving Anaesthetic Delivery and Postoperative Recovery*, 1 THE COCHRANE LIBRARY 1, 2 (2008) (reprinted by The Cochrane Collaboration).

36. *See* Lee A. Kearse et al., *Bispectral Analysis of the Electroencephalogram Predicts Conscious Processing of Information During Propofol Sedation and Hypnosis*, 88 ANESTHESIOLOGY 25, 25-34 (1998).

37. *Id.*

38. *See* Myles et al., *supra* note 35, at 1757, 1763; Punjasawadwong et al., *supra* note 35, at 6. R R

39. Leonidas G. Koniaris et al., *Inadequate Anaesthesia in Lethal Injection for Execution*, 365 LANCET 1412, 1412-14 (2005).

obtained and the results have therefore been erroneously interpreted.

Thiopental undergoes postmortem redistribution. This means that the blood concentration of thiopental continues to decrease even after the inmate's death and the cessation of circulation.[40] There is unfortunately very little information on the postmortem kinetics of thiopental because historically thiopental has been of little importance to forensic toxicologists. There are no peer-reviewed papers in the medical literature that have evaluated the postmortem redistribution of thiopental. Medical examiners in several jurisdictions have drawn paired blood samples following executions in order to assess the presence and degree of postmortem redistribution.[41] The first blood sample was obtained soon after the execution, while the second blood sample was obtained hours later at the time of autopsy. We are aware of the following sets of paired blood samples that demonstrate that postmortem redistribution of thiopental does indeed occur:

Jurisdiction	Inmate	Date	[Thiopental] mcg/mL Obtained soon after death	[Thiopental] mcg/mL Obtained at autopsy
CT	Ross	5/13/05	29.6	9.7
NC	McHone	11/11/05	21	1.5
NC	Syriani	11/18/05	12	4.4
NC	Boyd	12/2/05	29	11
NC	Simpson	1/20/06	42	12
MT	Dawson	8/11/06	21	3

In each case, "soon" after death means that the blood sample was drawn within an hour of completing the execution. Autopsies were performed at various times following the executions, ranging from about seven to eighteen hours.

Some persons have argued that this table represents nothing more than a group of random numbers.[42] There are indeed *pooled* data that are purported to demonstrate no time-dependent de-

40. *See* A.L. Pélissier-Alicot et al., *Mechanisms Underlying Postmortem Redistribution of Drugs: A Review*, 27 J. ANAL. TOXICOL. 533, 533-44 (2003).

41. Such postmortem analyses have been performed following executions in Connecticut, Montana, and North Carolina.

42. *See generally* Susi Vassallo, *Thiopental In Lethal Injection*, 35 FORDHAM URB. L.J. 957 (2008); Teresa A. Zimmers & Leonidas Koniaris, *Peer-reviewed Studies Iden-*

crease in the thiopental concentration in blood following death.[43] The table above is, however, the only example of *paired* data in which blood samples were drawn from the *same* inmate at *different* times following death. Applying Student's t-test for paired data to the data in the above table yields a p value of 0.0013. The interpretation of this statistical result is that there is a 99.9987% probability of a significant *decrease* in the blood thiopental concentration as a function of time following death by lethal injection where death closely follows a single rapid infusion of the drug and pseudoequilibrium with the majority of the body's tissues did not have time to be completed.[44] These data confirm the process of postmortem redistribution and would suggest that a rise in blood thiopental concentrations would be seen if similar paired postmortem samples were obtained when death occurred much longer after a dose of thiopental (as might occur in a clinical situation) at a time well after pseudoequilibrium between blood and tissue drug concentrations when the concentration gradient would be expected to be reversed.

In addition to the process of postmortem redistribution, another possible source of misleading postmortem thiopental data is the difference in the concentration of thiopental in arteries and veins. Pathologists most commonly draw postmortem blood samples from the femoral vein in the groin. Located immediately next to the femoral vein is the femoral artery. During life, it is usually easy to locate the femoral artery because it is typically the strongest peripheral pulse in the body. Following death, this landmark is lost. Since the femoral vein has a greater diameter, when a needle is inserted blindly in the groin, the femoral vein is more likely to be entered. However, Figure 9 shows that there may be substantial and clinically meaningful differences between the arterial and venous concentrations of thiopental. Assuming a normal cardiac output, differences between the arterial and venous concentrations of thiopental are expected for approximately four minutes following the beginning of thiopental administration. In contrast, if thiopental were to cause a large decrease in cardiac output (as is expected with the large doses used in lethal injection protocols), the differ-

tifying Problems in the Design and Implementation of Lethal Injection for Execution, 35 FORDHAM URB. L.J. 919 (2008).

43. *See* Koniaris et al., *supra* note 39, at 1412-14; Teresa A. Zimmers et al., *Authors' Reply, Inadequate Anaesthesia in Lethal Injection for Execution*, 366 LANCET 1073, 1074-76 (2005). R

44. *See* Stanton Glantz, PRIMER OF BIOSTATISTICS 322-25 (McGraw-Hill, 6th ed. 2005).

ence in the arterial and venous concentrations will persist until well after the expected occurrence of death.

The accurate differentiation between the femoral artery (lacking a pulse) and the femoral vein following death requires dissection and visualization of both vessels. Many medical examiners are unwilling to perform such a procedure at a prison on an inmate who has just been executed. Were a state to decide that the acquisition of a blood sample from a known blood vessel is a prudent idea, they might consider hiring a funeral director to perform the procedure. Since the process of embalming involves dissection and visualization of arteries and veins so that the embalming fluid can be injected, funeral directors should readily be able to obtain accurately femoral arterial and femoral venous blood for analysis.

We believe that there should be as much transparency as possible in the lethal injection procedure. Therefore, we support the practice of obtaining postmortem blood samples for thiopental analysis as a routine procedure. It is, however, crucial to obtain the blood sample properly and that means drawing it soon after the inmate's death, preferably within a few minutes and definitely within an hour.

VI. CONCLUSIONS

In summary, our pharmacokinetic and pharmacodynamic predictions of the effects of thiopental as used in the lethal injection protocols we have reviewed suggest that these protocols, if implemented as written, will result in the rapid death of the inmate without undue pain or suffering.

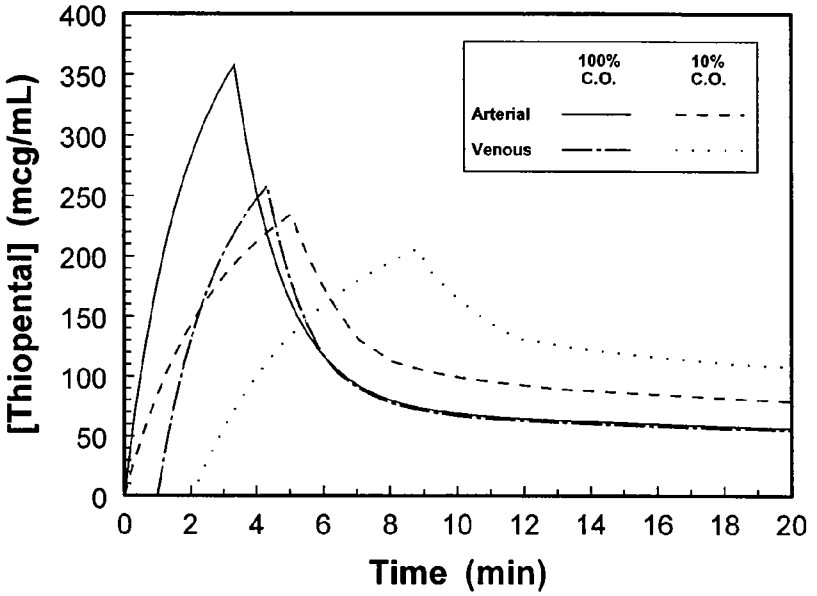


Figure 9: The effect of thiopental-induced decrease in cardiac output on the time course of the arterial and venous concentrations of thiopental. The predicted arterial blood concentration of thiopental following the administration of a dose of 5000 mg given at a rate of 1 mL/sec to an average 80-kg person is depicted by the solid line. The simultaneous venous blood concentration is depicted by (— - —). The two other lines assume a 90% decrement in cardiac output caused by thiopental. The dashed line depicts the predicted arterial concentration, while the dotted line depicts the predicted venous concentration.[45]

Implementing a protocol as written means the correct doses of the correct medications are administered in the correct order into a properly functioning intravenous delivery system and allowing sufficient time for thiopental to produce its effect.

We previously discussed that the cardiovascular and respiratory effects of thiopental given by itself in doses of 2000 mg and above are likely to be lethal in virtually everyone. Much has been written and said about adopting lethal injection protocols that rely on a single drug alone such as thiopental. As clinical pharmacologists, we can describe the advantages and disadvantages in comparing the current three-drug protocol with a protocol consisting of thio-

45. The pharmacokinetic model for thiopental used in Figure 9 is in T.D. Homer & D.R. Stanski, *The Effect of Increasing Age on Thiopental Disposition and Anesthetic Requirement*, 62 ANESTHESIOLOGY 714, 714-24 (1985). Some of the cardiovascular modeling was performed using the program A-ware, Springer Electronic Media.

pental as the only medication. We cannot, however, state which option is "better" because in this context "better" is based not upon pharmacological considerations but is actually a public policy decision best made by well-informed policy makers.

Some persons have contended that a large dose of thiopental given by itself does not reliably produce death.[46] In the Netherlands, where euthanasia and physician-assisted suicide are both legal, the Royal Dutch Society for the Advancement of Pharmacy wrote, "For intravenous administration, thiopental receives most consideration. It is not possible to administer so much of it that a lethal effect is guaranteed, but the substance is quite suitable for producing coma, after which termination may be effected using a muscle relaxant."[47] In the same article, the thiopental dose to be used was stated as, "intravenous administration of 1 g thiopental sodium, if necessary, 1.5-2 g of the product in case of strong tolerance to barbiturates."[48] Apparently the largest dose of thiopental used in the Netherlands was only 2 g (or 2000 mg) and it is therefore not surprising that such a dose was found to be less than 100% lethal.

The primary advantage of the three-drug protocol is that there is a definite and rapid end-point to the protocol and that is the onset of a flat-line ECG that can be assessed remotely by viewing an ECG monitor. The primary disadvantage is that there is the risk that the inmate could experience pain and suffering if the dose of thiopental is not properly administered for whatever reason and the pancuronium and potassium chloride are then administered to a conscious person. Another disadvantage to the three-drug protocol is that the potassium chloride, in addition to its action in stopping the heart, also causes widespread stimulation of nerve and muscle tissue throughout the body. Such stimulation is often manifested as involuntary muscle contractions that may have in the past been misperceived by lay witnesses as consistent with pain or suffering, or experiencing a seizure. In fact, it is most unlikely that someone given a large dose of thiopental, an excellent anticonvulsant medication, could suffer a seizure. One action of the pancuronium is to mitigate these involuntary muscle contractions.

46. Teresa A. Zimmers et al., *Lethal Injection for Execution: Chemical Asphyxiation?* 4(4) PLoS MEDICINE 646, 646-47 (2007).

47. For an English translation of the article, see *Administration and Compounding of Euthanasic Agents*, The Hague (Royal Dutch Society for the Advancement of Pharmacy 1994), *available at* http://wweek.com/html/euthanasics.html.

48. *Id.*

The primary advantage of a protocol in which a large dose of thiopental is given by itself is that there is no risk whatsoever of the inmate experiencing pain or suffering due to the effects of pancuronium or potassium chloride. If the intravenous catheter were to malfunction and the thiopental were deposited next to, instead of inside of, the vein, the inmate might experience some pain at the injection site but in fact this is a potential risk to which any patient given thiopental for anesthesia is subjected. The primary disadvantage of this single-drug protocol is that, although the inmate will likely die within a few minutes, his death will not be immediately reflected on the ECG monitor. In fact, following a large dose of thiopental that causes the inmate to stop breathing, experience a huge drop in blood pressure, and therefore a fatal decrease in oxygen delivery to critical tissues, it might very well take a half hour or longer for the ECG to become flat. In this case, it would be imprudent to wait for the ECG to become flat, and death would need to be ascertained by a physical examination that demonstrated the absence of a heartbeat or evidence of circulation. Whether this physical examination is performed by a physician or a paraprofessional credentialed to pronounce death (such as a nurse or a paramedic), either the person would be visible to the witnesses or the curtains in the death chamber would need to be drawn for the pronouncement of death to maintain this person's anonymity. Once again, we are unable to state, based upon pharmacological principles, which of these options is "better," however, we believe that those policy makers responsible for making such decisions are entitled to accurate scientific information in order to make an informed policy decision.

APPENDIX L

DECLARATION OF DAN J. PACHOLKE

I, DAN J. PACHOLKE, make the following declaration:

1. I am currently employed as the Prison Administrator for the Department of Corrections (DOC). As the Prison Administrator, I supervise the operation of a number of Washington State prisons, including the Washington State Penitentiary (WSP). I am over the age of eighteen and competent to testify as a witness. The declaration set forth below is based on my personal knowledge.

2. Before I became the Prison Administrator, I was a prison superintendent at the following DOC prison facilities: Cedar Creek Corrections Center (2003-2006), Stafford Creek Correction Center (2007-2008), and interim superintendent at the Monroe Correctional Complex (2008). I have worked for DOC for 26 years. Attached to this declaration as Attachment A is a true and correct copy of my curriculum vitae.

3. As the DOC Prison Administrator, I supervise the WSP Superintendent, Stephen Sinclair. I am familiar with DOC Policy 490.200, Capital Punishment.

4. Superintendent Sinclair has reported to me that each member of the lethal injection team has sufficient training or experience to carry out the lethal injection process without any unnecessary pain to Mr. Stenson. Superintendent Sinclair has reported to me the individual team members who will assist in the execution by lethal injection will each have one or more years of professional experience as a certified Medical Assistant, Phlebotomist, Emergency Medical Technician, Paramedic, military corpsman, or similar occupation, as required by DOC Policy 490.200, Directive IX(A)(1)(d).

5. Pursuant to the requirements of DOC Policy 490.200, Directive VIII(1)(2) practice sessions have been conducted at WSP in anticipation of Mr. Stenson's scheduled execution. I have been present during at least two sessions for lethal injection and two sessions for hanging.

6. Regarding lethal injection, I attended two practice sessions on October 14, 2008, in the execution chamber at WSP. Each of these sessions involved a full walk-through of the

entire lethal injection process and the insertion of intravenous lines in both arms of two individuals. The lethal injection process includes the escorting in of the inmate subject to the death penalty, the placing of this person on the table, and the insertion of the intravenous lines. In one practice session, I assumed the role of the inmate subject to the death penalty. I was placed on the gurney in the execution chamber and strapped to the gurney. From there, I observed the actions of the lethal injection team. In the other practice session, I assumed the role of the superintendent while Superintendent Sinclair assumed the role of the inmate subject to the death penalty. Again, I observed the actions of the lethal injection team. In both practice sessions, two separate intravenous lines were inserted into either my arms or the arms of Superintendent Sinclair, one intravenous line on each arm, and flows of saline were initiated. Thereafter, members of the lethal injection team went through the tasks of simulating the application of the substances called for under the DOC Policy 490.200, sodium thiopental, pancuronium bromide, and potassium chloride. When I assumed the role of an inmate, I felt little or no pain during the practice session. The insertion of the needle and catheter occurred very much like when I have given blood. The lines were inserted with no apparent difficulty. I also observed nothing indicating that Superintendent Sinclair experienced any pain as the intravenous lines were inserted into his arms during the practice session in which he assumed the role of the inmate. Lethal injection team members performed their respective roles without any apparent difficulty. They all appeared to know their assignments and performed them without any difficulty.

7. I attended two practice sessions for hanging on October 19, 2008, at WSP. During both sessions, I was present on the upper floor of the execution chamber where the inmate subject to the death penalty would be escorted prior to an execution by hanging. In each of the practice sessions I witnessed, a mannequin was "dropped" through the trap door. Both practice sessions occurred without any difficulty and the steps leading up to and including the execution occurred according to DOC Policy 490.200.

8. In the practice sessions involving the mannequin, the noose was placed tightly around the mannequin's neck with the noose knot directly behind the mannequin's left ear and the running part of the noose (or the loop) placed in the front of the mannequin's neck. After the noose has been securely placed, the trap door is opened and the mannequin falls through and the rope is extended to five full feet. In each of these sessions, the hanging mechanisms functioned without error or incident.

9. Based on my observations of the execution practice sessions discussed above and on my conversations with Superintendent Sinclair, I observed nothing indicating any inability by either the execution team or Superintendent Sinclair in carrying out DOC Policy 490.200.

10. I will be present in the execution chamber during Mr. Stenson's execution and will ensure that DOC Policy 490.200 is followed.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge.

DATED this 7 day of November, 2008, at Olympia, Washington.

DAN J. PACHOLKE

APPENDIX M

THE SUPREME COURT OF WASHINGTON

KATIE VARGAS,
Petitioner, an individual and on behalf of her next friend, Jeremy Sagastegui

v.

JOSEPH LEHMAN, Director of the Department of Corrections, and JOHN LAMBERT, Superintendant Washington State Penitentiary

Respondent.

NO. 67190-7

ORDER

Jeremy Sagastegui is scheduled to be executed on October 13, 1998. He has not sought to challenge the execution. Katie Vargas, seeking to act as his next friend, petitions for writs of prohibition and mandamus, directed to officials of the Department of Corrections, to require the execution date to be reset under RCW 10.95.160(2). The en banc court, having considered by telephonic conference call Ms. Vargas' petition and the State's response, concludes that Ms. Vargas has no standing to seek the writ, and that because the execution date has not yet passed, the circumstances presented by this case do not trigger the provisions of RCW 10.95.160(2) regarding the setting of a new execution date. Accordingly,

It is hereby ordered:

The petition for writs of prohibition and mandamus is denied.

Jerry L. Alexander
for a majority of the Court

October 12, 1998

THE SUPREME COURT OF THE STATE OF WASHINGTON

KATIE VARGAS, Petitioner, an individual and on behalf of her next friend, Jeremy Sagastegui,

v.

JOSEPH LEHMAN, Director of the Department of Corrections, and JOHN LAMBERT, Superintendent Washington State Penitentiary,

Respondents.

No. 67190-7

DISSENTING OPINION TO ORDER (dated Oct. 12, 1998)

Filed OCT 16 1998

SANDERS, J. (dissenting)—At 11:07 p.m. on Monday, October 12, this court's order denying a stay of Jeremy Sagastegui's imminent execution was filed with the Clerk of the Court. At 12:40 a.m. on Tuesday, October 13, less than two hours later, Segastegui was executed at the Washington State Penitentiary. Thus, a dissent to the majority's action is as anticlimactic now as it was futile at its inception. Nevertheless I will state my reasons for

dissenting, not for the benefit of the condemned man, but for those who survive him.

The majority casts its order refusing to halt the execution as a simple and summary response to a motion brought by Katie Vargas, the mother of the prisoner. It concluded that because Ms. Vargas "has no standing to seek the writ" and "the execution date has not yet passed," this court lacks the necessary lawful authority to delay the execution for 30 days. *Vargas v. Lehman*, No. 67190-7, Order (Oct. 12, 1998).

On October 11, 1998, at 3:32 p.m., the United States Court of Appeals for the Ninth Circuit stayed Mr. Sagastegui's execution date pending further proceedings to determine whether his mother, Katie Vargas, was entitled to pursue his cause as his "next friend." *Vargas v. Lambert*, Order, No. 98-99028 (9th Cir. Oct. 11, 1998) 1998 WL _____ (hereinafter Vargas Order). That stay was issued by a two to one majority of the three judge panel, the dissenter being Circuit Judge Kleinfeld who prophetically, I believe, observed: "This case, like all eve of execution death penalty cases, suffers from the defects of deliberation caused by last-minuteness." Vargas Order, slip op. at 25 n.1 (Kleinfeld, J., dissenting).

Certainly if such "last-minuteness" was a defect in the deliberation of the United States Court of Appeals, it is even a greater defect in ours since the stay of the Court of Appeals decision was lifted by the United States Supreme Court through filing a written order to that effect with this court at 7:31 p.m. Pacific time on Monday, October 12, "execution eve," only four and a half hours before the time originally scheduled for Mr. Sagastegui's execution. After that order was filed one can only imagine the hysterical agony of the grieved mother and the desperate panic of her attorneys—then joined by a single purpose—to stay the executioner's hand, not to mention the haste of attorneys representing the State to respond.

I therefore submit especially in matters infected by the defect of last-minuteness we must particularly heed to the fact that "[t]he United States Supreme Court has more than once reminded us of the indisputable fact that 'death is different' and that this difference must impact on the court's decision making, requiring the utmost solicitousness for the defendant's position." *State v. Martin*, 94 Wn.2d 1, 21, 614 P.2d 164 (1980) (citations omitted).

I. *The statute clearly and literally required this execution to be rescheduled.*

At issue is the application of RCW 10.95.160(2):

> If the date set for execution under subsection (1) of this section is stayed by a court of competent jurisdiction for any reason, the new execution date is automatically set at thirty judicial days after the entry of an order of termination or vacation of the stay by such court unless the court invalidates the conviction, sentence, or remands for further judicial proceedings. The presence of the inmate under sentence of death shall not be required for the court to vacate or terminate the stay according to this section.

A court must give effect to the plain language of a statute when construing it. *Human Rights Comm'n ex rel. Spangenberg v. Cheney Sch. Dist. 30*, 97 Wn.2d 118, 121, 641 P.2d 163 (1982) ("Where statutory language is plain and unambiguous, a statute's meaning must be derived from the wording of the statute itself."). The court should not strain the clear language of a statute to achieve a result. *Wright v. Engum*, 124 Wn.2d 343, 351-52, 878 P.2d 1198 (1994). Moreover, the court may look to the purpose of a statute only if the language is susceptible to more than one meaning and is therefore ambiguous. *Harmon v. Department of Soc. & Health Servs.*, 134 Wn.2d 523, 530, 951 P.2d 770 (1998); *Lynch v. Department Labor & Indus.*, 19 Wn.2d 802, 814, 145 P.2d 265 (1944) ("[the statutory language]

has but one meaning, and there is but one conclusion that can be drawn from it. When such is the case, a statute does not have to be construed or interpreted so as to ascertain the intent of the lawmaking body."). And this is, after all, a death case where we indulge every latitude to the condemned. *Martin, supra.*

The majority held RCW 10.95.160(2) only applies in cases where the original date scheduled for execution has passed. However I find nothing in the language of the statute to suggest that the original date of execution must have passed before the statute is applicable. And no authority so holds.

RCW 10.95.160(2) clearly and unequivocally states if an execution is stayed by a competent court for any reason, the new execution date is automatically set for thirty days after entry of the order of vacation. Although the statute literally applies by its terms to this case, the date was not reset.

Here the 9th Circuit (a court of competent jurisdiction) stayed the execution. This stay was subsequently vacated by the United States Supreme Court. According to the plain words and ordinary meaning of RCW 10.95.160(2), the order of the United States Supreme Court which

vacated the 9th Circuit's stay required "automatic" rescheduling of the date of execution to 30 days' hence. This plain and obvious meaning of the statute's words was confirmed in *In Re Personal Restraint Petition of Lord*, 123 Wn.2d 737, 870 P.2d 964 (1994), where this court stated that "[t]he statute [RCW 10.95.160(2)] contemplates that the Department of Corrections will, as a matter of course, set a new execution date once the stay is lifted." *Lord*, 123 Wn.2d at 741. No judicial involvement is even contemplated! Rescheduling is a ministerial act.

Nor does it make sense to contend that the "date" of this execution was not "stayed" because the date had not yet passed. "Stay" means "a stopping; the act of arresting a judicial proceeding by the order of a court . . . ." *Black's Law Dictionary* 1413 (6th ed. 1990). What the Ninth Circuit did was exactly that: It stopped the execution. The vacation of the stay by the United States Supreme Court was the exact circumstance contemplated by this statute, which is operative precisely when a stay is lifted "by an order of termination or vacation . . . ." What could be clearer?

The state argued, and the majority apparently accepted, the *policy* behind RCW 10.95.160(2) is to provide for rescheduling of an execution

date only where the original date had passed. I do not share that view, but even if the majority were correct, men's lives are not to be taken on unwritten policy grounds. Policy is not law. If the legislature wished to limit the statute to *only* situations where the execution date had passed, it could easily have said so by simply and clearly including specific language to that effect. *Cf., e.g.*, RCW 10.95.200 (when execution date "shall have passed" for a reason other than a stay, the trial court issues a new death warrant). Since the legislature did not include language limiting RCW 10.95.160(2) to such situations, we are in no position to judicially amend the statute to deny the statutory reprieve to the condemned.

Moreover, there *are* sound policy reasons to explain and justify the automatic statutory delay of an execution following vacation of a stay at literally the eleventh hour before a life is to be taken.

When the execution date is "revived" by at the last minute lifting the stay the defendant suddenly faces imminent death with little time to consult with counsel, and virtually no time to properly research and prepare briefs to aid the diligent consideration of his case by the court. Nor can the court

reliably discharge its responsibility to uphold the law. The facts of this case are very much in point.

At least one other jurisdiction has implemented our state's policy by court rule. *See* Montana Rules of Court, Rule 9 of Rules for Automatic Review of a Death Sentence, page 118 ("If the stay expires upon affirmance of a death sentence after the date set for execution of sentence has passed *or within five days prior to the execution date*, the execution date will be vacated, and the Supreme Court will remand the case to the district court for the setting of a new execution date . . . .") (emphasis added). Certainly a plain language application of RCW 10.95.160(2) which mandates automatic rescheduling of the execution date in cases such as this where the stay of execution is vacated only a matter of hours before the time scheduled for execution, serves the interest of preserving life to ensure all arguments arising after vacation of the last stay are properly heard and considered. If we need to *justify* the statute to apply it, we can.

II. Standing is not the issue.

RCW 10.95.160(2) requires the execution date to be "automatically" delayed for 30 days without judicial proceeding or adversary contest.

RCW 10.95.160(2), *Lord*, 123 Wn.2d at 74. Standing is a rule for adversarial litigants, not administrative discharge of ministerial duties.

Moreover, the majority's claim that the matter may not be determined on the merits because of lack of standing is belied by its holding, *on the merits*, that the statute does not pertain to situations such as this. In point of logic, and law, if standing is mandatory, the absence of standing necessarily negates the possibility of any holding on the merits because the most important purpose of the standing doctrine is to ensure that claims will be thoroughly and forcefully submitted to the court so as to aid their appropriate disposition on the merits. When claims are not thoroughly and forcefully submitted, it is said, we cannot trust the result. But in this case we have a holding that there is no standing *and* a result on the merits. Such suggests either (1) lack of standing is no impediment to reaching the merits and/or (2) it is the result to be achieved which really matters, and ultimately drives all other considerations before it.

Since we previously denied Ms. Vargas's application to intervene as her son's "next friend," a decision in which I personally concurred (*Vargas v. State*, No. 67190-7, *Order Denying Motions* (Wash. Oct. 1, 1998)), I

would certainly also concur in the majority's observation that Ms. Vargas has no standing in the instant proceeding. However that avoids the more fundamental question of whether or not the standing of Ms. Vargas is a condition precedent to the authority of this court to order the execution to be rescheduled in accordance with RCW 10.95.160(2).

Indeed, the whole proceeding before this court involving a detailed evaluation of the propriety of imposing the death penalty upon Mr. Sagastegui was conducted without being invoked by a party with standing. *State v. Sagastegui*, 135 Wn.2d 67, 954 P.2d 1311 (1998). Lest we forget, Mr. Sagastegui did not appeal to this court from the imposition of a death penalty and those submittals reaching this court from the prisoner rather unequivocally stated his position that no further proceedings should be had, urging his own execution transpire forthwith. Moreover, in the context of that review on the merits, we granted permission to the Death Penalty Committee of the Washington Association of Criminal Defense Lawyers to act as amicus and raise arguments in opposition to the death penalty and we considered, and rejected on the merits, those arguments in a comprehensive written decision, to which I also subscribed my name. *State v. Sagastegui*,

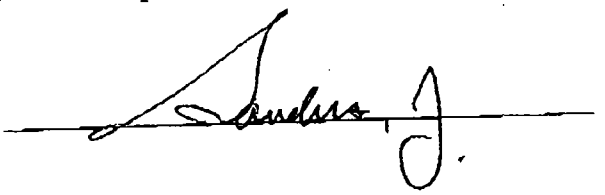
135 Wn.2d at 70. Therefore in a case which we have previously adjudicated on the merits, absent standing, I find the claim that we may not require the execution to be "automatically" rescheduled for lack of standing to be anomalous at best.

Nor do the considerations which even prompt concern for standing arise in this case. "The standing doctrine prohibits a litigant who is not adversely affected by a public act or statute from asserting the legal rights of another." *Greater Harbor 2000 v. City of Seattle*, 132 Wn.2d 267, 281, 937 P.2d 1082 (1997). Thus the standing doctrine is a disability to the litigant, not a limitation to the court's jurisdiction. The policy behind the judicial invention of the standing doctrine is "to assure that the legal questions presented to the court will be resolved, not in the rarefied atmosphere of a debating society, but in a concrete factual context conducive to a realistic appreciation of the consequences of judicial action." *Valley Forge Christian College v. Americans United for Separation of Church & State, Inc.*, 454 U.S. 464, 472, 102 S. Ct. 752, 758, 70 L. Ed. 2d 700 (1982). But in the instant proceeding at the time of this court's oral deliberations, it is rather obvious that we were not debating a hypothetical or academic point. An

execution of a human being was at stake! The legal issue was specific, narrow, and easily resolved: to delay or not to delay the execution, that was the question. Nor were the facts associated with the motion incompletely presented nor, even conceivably, misstated: The Ninth Circuit had stayed the execution date, the United States Supreme Court had vacated the stay, and the Department of Corrections intended to execute this man at the stroke of midnight, or shortly thereafter.

Under these circumstances, given the statutory imperative to reset the execution date, the unwillingness of the Department of Corrections to follow the statute, the unwillingness of the condemned man to demand that the lawful processes of this state be followed with respect to his execution, the "defects of . . . last minuteness," our judicial recognition that "death is different," as well as the specific statutory scheme which not only eschews standing in death penalty review, but specifically states on the face of the

operative statute that "the new execution date is *automatically* set at thirty judicial days after the entry of an order of termination or vacation of the stay. . . ." RCW 10.95.160(2) (emphasis added), I conclude that it was the independent duty of this court to mandate that the execution of this man be rescheduled for 30 judicial days after entry of the order vacating the stay in accordance with the statutory mandate and that Ms. Vargas's lack of standing neither changes the law nor our responsibility to uphold it.[1]



[1] I request this opinion be published.