

MINUTES

MONTANA SENATE  
51st LEGISLATURE - REGULAR SESSION

COMMITTEE ON JUDICIARY

Call to Order: By Chairman Bruce D. Crippen, on January 25, 1989, at 10:00 a.m.

ROLL CALL

Members Present: Chairman Crippen, Vice Chairman Bishop, Senator Brown, Senator Halligan, Senator Harp, Senator Mazurek, Senator Pinsoneault, Senator Yellowtail

Members Excused: Senator Jenkins

Members Absent: None

Staff Present: Valencia Lane, Legislative Staff Attorney, Rosemary Jacoby, Committee Secretary

Announcements/Discussion: None

HEARING ON SENATE BILL 177

Presentation and Opening Statement by Sponsor: Senator Yellowtail of Wyola, representing District #50, opened the hearing on the bill which provides an administrative procedure for determining paternity of children receiving child support. He indicated that the bill would provide relief to the system while simplifying the process. He said the bill was not requested by the department.

List of Testifying Proponents and What Group they Represent:

Brenda Nordlund, Montana Women's Lobby  
Don Espelin M.D., DHES

List of Testifying Opponents and What Group They Represent:

None

Testimony:

Brenda Nordlund, representing Montana Women's Lobby stated that she stood in support of SB 177. (See Exhibit 1

and Exhibit 2 -Appendix B "Scientific Testing For Paternity Establishment).

Donald Espelin, M.D., representing DHES, believed that this bill would have a positive effect on their program. It would establish paternity in an expeditious fashion and increase the dollars available for prenatal care. (See Exhibit 3.)

Opponents:

None

Questions From Committee Members: Senator Mazurek asked why the bill didn't allow a blood test in a contested case for determination. He also questioned why that action was enforced in the district court. Brenda Nordlund replied that if the woman persisted in spite of the denial, then the Administrative Department proceeding could enter an order which would be processed through the district court. Then an order would be sent over to DHEF. The referral to the district court would come only if the alleged father denies his paternity in the face of conclusive results, she said.

Senator Mazurek questioned why the administrative process to didn't continue into other areas. Brenda Nordlund said the bill excluded all issues except paternity.

Senator Mazurek commented that this was simply an appeal, not a matter of being persistent of the denial. There would not be a ruling of the district court just because the alleged father continues to deny, once the test results are in. Brenda Nordlund responded they would exclude and segregate other issues from the administrative based on his denial.

Senator Mazurek stated that it was his understanding that the bill was originally part of the administrative package. He wondered why it had been removed. Ken Nordtvedt of the Department of Revenue replied that the "package" consisted of 3 or 4 bills pertaining to the improvement of child support enforcement. He was concerned that this bill might not protect the civil liberties of all parties involved. He said he knew the issue needed to be dealt with, but he withdrew the department's support from this particular bill. He said they were not opposed to this bill but were not supporting it at this point either.

Senator Mazurek said he understood the bill to be part of the federal mandate. He thought this particular bill came from Oregon. Ken Nordtvedt replied that the department designed a variety of mechanisms in an attempt to meet the performance standards of the federal government. After evaluating the final results for establishing paternity, they determined they had a 68.75% efficiency rate. He felt that Montana had failed to meet 75% substantial compliance standards, but it attempted to do so. He believed that, because the rate was close, the state should be considered to have met the 75% substantial compliance standard for establishing paternity. He said the DOR was not held by the federal government to implement any particular policy, but could lose federal funds if they don't meet the performance standards.

Senator Halligan asked for clarification of the district court's part in the bill. Brenda Nordlund explained that this was a trial bill that would allow the district court to not only reveal the administrative record, but also to look at additional evidence at the district court level.

Senator Mazurek asked if there were any problems getting matters decided upon in the district courts. John McRae replied that they have been experiencing civil difficulties with the district courts, but the problem was mainly due to the overburden of the court systems. He believed there were two problems pertaining to the district courts including: 1. The amount of time it took for a typical attorney to resolve a matter (over one year); and 2. The court system consisting of 56 individual courts with only 3 staff attorneys to service them.

Closing by Sponsor: Senator Yellowtail closed by stating that Nordtvedt indicated that the DOR was in compliance with federal requirements, but he said the state would be running into problems because of the slowness in dealing with these cases. Finally, he stated that he had ordered a fiscal note for this bill which would show a cost benefit, but it wasn't ready yet. He encouraged a Do Pass recommendation.

Presentation and Opening Statement by Sponsor: Senator Eck, District 40, opened by stating that this was a child support bill which originated with an attorney in Bozeman. She said the assumption was that, if a obligor had assets or income of any kind that were available, child support should be given. She continued by saying that this bill provided the veterans and social security benefits to become available for child support. Senator Eck hoped that the committee would pass SB 145.

List of Testifying Proponents and What Group they Represent:

Brenda Nordlund, Montana Women's Lobby  
John McRae,

List of Testifying Opponents and What Group They Represent:

None

Testimony:

Brenda Nordlund, Montana Women's Lobby, stated that this bill was consistent with their agenda in improving child support enforcement and revising child support. In the past the veterans and social security benefits were held outside execution laws. She asked for support of SB 145.

Opponents:

None

Questions From Committee Members: Senator Mazurek asked if the federal law didn't specifically prohibit use of social security and veterans from attachment and, if so was there anything the state could do to change that. Brenda Nordlund replied that there might be a problem with social security because it is derived from something other than an income source. She asked to defer the question to John McRae, who commented that it was available at the federal level if the benefits were income derived. Social Security and veteran benefits, which are based on the previous earnings of the individual, are subject to executions except those that are part of a disability and are not income based.

Senator Mazurek asked if the bill wouldn't have to specifically address that issue. John McRae felt that it wasn't necessary.

Senator Mazurek asked if the federal statute addressed maintenance where custodial parents were concerned. John McRae stated that the federal government had combined maintenance and child support. Where family support was necessary, the seizure of those funds would be allowed.

Closing by Sponsor: Senator Eck closed by stating that she had discussed the issue with attorney in Bozeman named McKinley Anderson. She had also looked at the worksheets used in determining the amount of support each parent was expected to contribute, and she felt they were worked out in a fair way. Determination of fiscal responsibility should consider all assets, she felt, even when looking at disabilities. She said she found no objections when she inquired of the people representing the veterans. She stated that Representative Spaeth, an attorney and veteran, carried the bill in the House, and she urged support.

#### HEARING ON SENATE BILL 172

Presentation and Opening Statement by Sponsor: Senator Pinsonneault of St. Ignatius, District 27, opened by stating that this bill was brought with little pride. He said he was not anti-sex, but he thought there was a time and place under appropriate circumstances for this type of conduct for adult males and females. This bill arose from a case in Missoula County, he said. An attorney, Anthony Keist, had a female client who came to him to attain his services on a debt collection. She did not have the funds for attorney fees. The attorney suggested she might have sex with him in exchange for the fees. In addition, he also suggested that she might procure a few others that might have sex for money. Both females arrived at the motel on the prearranged date, he said, but Mr Keist did not have any other perspective males who would pay for sex. After the attorney and client were alone in the room, he offered to exchange sex for \$50. At that point she said she had to go down to lock her car. Unknown to Mr. Keist, there was a sheriff from the department secreted away in the closet with a video camera and voice recorder, said Senator Pinsonneault. Mr. Keist was arrested on the spot, according to Senator Pinsonneault. Mr. Keist plead guilty to avoid prosecution and a \$500 fine. He explained that Montana's sexual event statutes provide punishment for these types of crime; however, in these particular instances they only amounted to a misdemeanor. If he

had shown up with others willing to exchange sex with his client, he could conceivably have been charged with promotion, which would have raised the violation to a felony. Senator Pinsoneault pointed out on page 1, line 13-14 of the bill, it stated that persons licensed under Title 37, chapter 3,4,17,22,23, or 61, who commit the offense could be prosecuted. It would be those professionals who would come within the scope of this particular statute. And should this type of conduct occur, the punishment would provide a term in jail not less than one year and a fine up to \$50,000, he said. In addition to any sentence imposed, after determining the financial resources under 242 of the convicting party, he would pay the victims psychological or psychiatric counseling and medical costs that might result from the offense. When the professional enjoys such an intimate, personal relationship with the client and uses and abuses that relationship in this fashion then he should pay the price, said Senator Pinsoneault.

List of Testifying Proponents and What Group they Represent:

Jerry Loendorf, Montana Medical Association

List of Testifying Opponents and What Group They Represent:

None

Testimony:

Jerry Loendorf, representing the Montana Medical Association in support of SB 172. He stated that they concur that certain professionals do take advantage of the situation. He believed that SB 172 would prohibit this activity which should be criminal, as well as grounds for discipline including suspension or revocation of licenses.

Questions From Committee Members: Senator Halligan stated that under licensing statutes, the same incident could happen with bankers as well. He felt that there was a need to be comprehensive when looking at the professionals, including both men and women. Senator Pinsoneault stated that he did not know where to draw the line regarding professions. He felt that to allow this sort of activity to only be a misdemeanor was a travesty.

Senator Crippen asked Senator Pinsoneault if the wording in subsection 3, page 2 "if able" could be changed to "may" regarding restitution. Senator Pinsoneault replied that this has come up and that you "can't get blood out of a turnip." He said a restitution requirement would be at the discretion of the judge.

Senator Beck asked if this was a partnership between two consenting adults. Senator Pinsoneault stated that this was not a consenting relationship, that there was too much despair between the two parties. He felt this type of activity was degrading to the profession of lawyers.

Senator Crippen informed Senator Pinsoneault if the client suggested having sex, then that was a solicitation in itself. Senator Pinsoneault agreed.

Closing by Sponsor: Senator Pinsoneault said the lawyer involved had been under suspicion for a long time, but it took the cooperation of a client to make the charges stick. He closed.

#### EXECUTIVE ACTION ON SENATE BILL 107

Discussion: Valencia Lane passed out 2 sets of amendments. (See Exhibits 4 and 5.) Valencia Lane, Legislative Staff Attorney, explained that both versions of the same amendment were identical except for amendment 7, page 2. The difference between them was that version I could require the board to recommend granting clemency or denying clemency, and the other version would allow the Board to make no recommendation at all. She believed the position of the Attorney General was to require the board to recommend either to deny or grant clemency.

Tom Keegan, representing the parole board, said that the board felt that the Governor should make the final decision no matter what the recommendation is. This bill would clarify that, he said. If the board were to deny recommending clemency, it would end there, he said. He felt that was a pretty heavy responsibility to place on three lay people. He felt this was a policy decision to be made by the legislature. In addition, he said he could envision a situation in which there would be a 1-1 tie with an abstention, particularly in capital cases. He said the board gets 20 to 30 requests for commutation each year and they have to review the merits of each case. In cases

clearly without merit, there are no public hearings and are denied by the board. He said that in non-capital cases, according to this bill, the procedure would remain the same. The only change pertained to capital cases where the board would have hearings followed by a recommendation which would go to the governor regardless of governor. In non-capital cases where we do have hearings, the recommendation would also go the governor, he said.

Senator Mazurek asked if the ACLU would be able to come in and file every case. Tom Keegan commented that the board was split on that, but his personal feeling was that anybody should be able to apply for clemency on behalf of an inmate. Another board member felt that only an attorney, guardian or conservator who could file, he said. The statutes indicate that anybody could file in his estimation, but this was a policy decision for the legislature. He felt the bill might also address a situation where a person to be executed had a borderline IQ or was retarded, but not incompetent, and had no guardian.

Senator Pineseault asked if the Governor would receive a verbatim transcript of the hearing. Tom Keegan answered yes.

Senator Crippen asked Senator Pineseault asked if there were any problems with the amendments. Senator Pineseault said he did not have a problem so far as he could see, but he did disagree with Mr. Keegan's view that anyone should be able to file for commutation, such as what happened with the Keith case. He felt that was one of the problems of the process, which might cause everybody to file for commutation. He felt there needed to be an orderly process.

Senator Crippen asked for clarification of amendment #3 -- the "court-appointed next friend." Valencia said it was a person appointed in the case of a mentally incompetent or developmentally disabled person.

Tom Keegan stated that one of the technical problems in drafting the bill was that the old law stated: "After the board has duly considered an application for executive clemency and has by majority vote voted in favor of a recommendation of executive clemency to the Governor." He asked the legal staff to clarify that and say "vote by majority vote to have a hearing," then make a decision. He said that was a change from present statute.

Valencia said the only difference between the amendments was



amendment #7. In Version 1 which was recommended by the Attorney General's office stated that the board must recommend clemency or that it be denied. Version 2 recommended by Mr. Keegan would like three possibilities: The board could recommend granting clemency, could recommend denying clemency or make no recommendation at all. Senator Pinsoneault stated that he supported the Version 1 amendment. He felt that the final decision should rest with the Governor.

Amendments and Votes: Senator Pinsoneault moved to adopt Version I amendments. The motion CARRIED UNANIMOUSLY.

Recommendation and Vote: Senator Pinsoneault moved that SB 107 DO PASS AS AMENDED. The motion CARRIED UNANIMOUSLY.

#### EXECUTIVE ACTION ON SENATE BILL 145

Discussion: Senator Crippen asked for Valencia to clarify the statement that the federal law could not prohibit attachment against Social Security or veterans benefits. Valencia referred to subsection (b) and (c), saying that there is reference to subsection 2 which allows execution on these types of benefits. She asked if he wanted an amendment to clarify that only income-based veteran benefits and social security benefits that could be attached. She stated that she could have it prepared by Friday.

#### EXECUTIVE ACTION ON SENATE BILL 172

Discussion: Senator Pinsoneault said he had noted an interest to include other professionals. But, he felt that there was a difference between professionals who share most intimately thoughts and other professionals in other categories. He said the bill attempted to be fair and reasonable.

Senator Mazurek stated that a lot of professionals share intimate relationships and would like to be included. He also had other problems he felt needed clarification. After further discussion it was decided to take action at a later date.

#### EXECUTIVE ACTION ON SENATE BILL 177

Discussion: Senator Yellowtail expected the fiscal note to be ready at any time. Senator Crippen said the bill could be passed out subject to the fiscal note.

Senator Halligan asked Valencia if transition language was needed. Valencia Lane stated that there was reference on page 11, line 13-15.

Senator Brown commented that Senator Yellowtail should get the opportunity to discuss the fiscal note impact. He felt the committee should know what 68% of the AFDC payments are to know how many dollars might be involved.

Senator Harp explained that there was a bill similar to this in Taxation Committee in which the percent was between one and five. The loss was 1.3 million and 1% was about \$230,000, he said.

Amendments and Votes: None

Recommendation and Vote: Senator Yellowtail moved SB 177 DO PASS. The motion CARRIED UNANIMOUSLY.

#### EXECUTIVE ACTION ON SENATE BILL 134

Discussion: Senator Crippen, reading from the fiscal note, stated that the impact was \$44,352 the first year (1990) and \$47,388 (1991) or a difference of \$3,028. Senator Mazurek said this was a bill that came unanimously out of the Welfare Subcommittee in the House without any opposition. He said all it does is allow people to earn up to \$30 more, which is the same criteria that applies to unemployment benefits.

Amendments and Votes: None

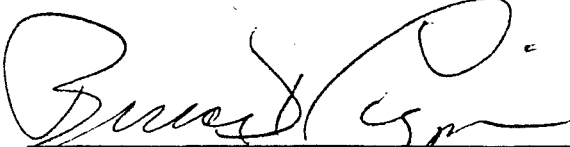
Recommendation and Vote: Senator Mazurek moved SB 134 DO PASS. The motion CARRIED UNANIMOUSLY.

#### EXECUTIVE ACTION ON SENATE BILL 180

Discussion: The committee agreed to postpone action to a further meeting.

ADJOURNMENT

Adjournment At: 11:22 a.m.



SENATOR BRUCE D. CRIPPEN, Chairman

BC/rj

min125jr.sr

ROLL CALL

JUDICIARY

COMMITTEE

51st LEGISLATIVE SESSION -- 1989

Date Jan. 25, 1989

NAME	PRESENT	ABSENT	EXCUSED
SENATOR CRIPPEN	✓		
SENATOR BECK	✓		
SENATOR BISHOP	✓		
SENATOR BROWN	✓		
SENATOR HALLIGAN	✓		
SENATOR HARP	✓		
SENATOR JENKINS			✓
SENATOR MAZUREK	✓		
SENATOR PINSONEAULT	✓		
SENATOR YELLOWTAIL	✓		

Each day attach to minutes.

SENATE STANDING COMMITTEE REPORT

January 25, 1989

MR. PRESIDENT:

We, your committee on Judiciary, having had under consideration SB 107 (first reading copy -- white), respectfully report that SB 107 be amended and as so amended do pass:

1. Title, line 7.

Strike: first "AND"

Insert: "THROUGH 46-23-303, 46-23-307,"

Following: "46-23-315,"

Insert: "AND 46-23-316,"

2. Page 1, lines 12 and 13.

Following: "clemency --" on line 12

Strike: the remainder of line 12 through "board." on line 13

Insert: "application for clemency -- definitions. (1) "Clemency" means kindness, mercy, or leniency that may be exercised by the governor towards a convicted person. The governor may grant clemency in the form of:

(a) the remission of fines or forfeitures;

(b) the commutation of a sentence to one which is less severe;

(c) respite; or

(d) pardon. "Pardon" means a declaration of record that an individual is to be relieved of all legal consequences of a prior conviction.

(2) A person convicted of a crime need not exhaust judicial or administrative remedies before he files an application for clemency."

3. Page 1, line 22.

Following: "court-appointed"

Insert: "next friend,"

Following: "guardian"

Insert: ", "

4. Page 1, line 23.

Following: "made"

Insert: ": (a)"

5. Page 1, line 25.

Following: "convicted"

Insert: ";

Following: "and"

Insert: "(b)"

6. Page 2, line 2.

Following: "applicant"

Insert: "prior to commission of the crime, at the time the offense was committed, and at the time of the application for clemency. Any recommendation made by the board shall be based on these two criteria"

7. Page 2, lines 4 through 9.

Following: "taken."

Strike: the remainder of lines 4 through 9 in their entirety

Insert: "The board may recommend that clemency be granted or denied. In noncapital cases, if the board recommends that clemency be denied, the application must not be forwarded to the governor and the governor may not take action on the case. In capital cases, the board shall transmit the application and either a recommendation that clemency be granted or a recommendation that clemency be denied to the governor. The governor is not bound by any recommendation of the board, but he shall review the record of the hearing and the board's recommendation before he grants or denies clemency. The governor has the final authority to grant or deny clemency in those cases forwarded to him."

8. Page 2, line 10.

Following: line 9

Insert: " Section 2. Section 46-23-302, MCA, is amended to read:  
"46-23-302. Order for hearing on application for executive clemency. After the board has duly considered an application for executive clemency and has by majority vote favored a ~~recommendation of executive clemency to the governor hearing~~, it must pass an order in substance as follows:

"Whereas, the Board of Pardons has officially received an application for executive clemency concerning . . . ., a convict confined in the state prison (or to one . . . ., who has been found guilty of an offense committed against the laws of the state), who was convicted of the crime of . . . . committed at . . . ., in the county of . . . ., State of Montana, on the . . . . day of . . . ., 19.., and sentenced for a term of . . . . years.

Therefore, be it ordered that . . . ., the . . . . day of . . . ., 19.., be set apart for the consideration of said executive clemency matter; and all persons having an interest therein desiring to be heard either for or against the granting of the pardon ~~or~~ or ~~reprieve~~, commutation, restoration of citizenship, or remission or suspension of fine or forfeiture are hereby notified to be present at . . . o'clock of said day, at . . . .

Further, ordered that a copy of this order be printed and published in the . . . (here insert name of some newspaper of general circulation in the county where the crime was committed), a daily (or weekly) newspaper printed and published at . . . ., in the county of . . . ., once each week for 2 weeks beginning . . . ., 19.., and ending . . . ."

Section 3. Section 46-23-303, MCA, is amended to read:

"46-23-303. Publication of order. The board must cause a copy of such order to be published in the newspaper therein designated at least once a week for 2 weeks prior to the hearing and, at the same time, cause to be deposited in the post office at the seat of government, postpaid, a copy of said order and notice addressed to the district judge, county attorney, and sheriff, respectively, of the county where the crime was committed and in like manner mail a copy of the order to the ~~petitioner and the convict applicant~~."

Section 4. Section 46-23-307, HCA, is amended to read:

"46-23-307. Decision of board. Within 30 days after the hearing of any capital case or in noncapital cases where the decision is made to recommend clemency be granted, the board must make a decision in writing, and if such decision be made to recommend executive clemency, the copy of the decision together with all papers used in each case shall be immediately transmitted to the governor.""

Remember: subsequent sections

9. Page 2, line 11.

Following: "respite"

Insert: "-- application"

10. Page 2, line 15.

Following: "proper."

Insert: "The governor may grant a respite upon application of a person authorized to apply for executive clemency and prior to any review or recommendation by the board of pardons."

11. Page 2, line 23.

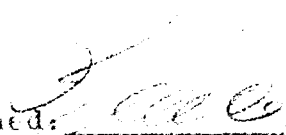
Following: line 22

Insert: " Section 6. Section 46-23-316, HCA, is amended to read:

"46-23-316. Governor's report to legislature. The governor must communicate to the legislature at each regular session each case of remission of fine or forfeiture, reprieve respite, commutation, or pardon granted since the last previous report, stating the name of the convict, the crime of which he was convicted, the sentence and its date, the date of remission, commutation, pardon, or reprieve respite, with the reason for granting the same, and the objection, if any, of any of the members of the board made thereto.""

Remember: subsequent sections

AND AS AMENDED DO PASS

Signed: 

Bruce D. Crippen, Chairman

*J.C.*  
11/26/89  
9:53 a.m.



SENATE STANDING COMMITTEE REPORT

January 25, 1989

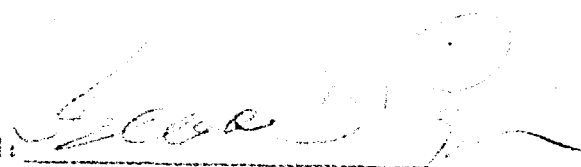
MR. PRESIDENT:

We, your committee on Judiciary, having had under consideration SB 177 (first reading copy -- white), respectfully report that SB 177 be amended and as so amended do pass:

1. Page 1, line 3.

Strike: line 3 in its entirety

AND AS AMENDED DO PASS

Signed: 

Bruce D. Crippen, Chairman

H.C.  
1/26/89  
8:41  
a.m.

STATE OF OHIO COMMISSION REPORT

January 25, 1939

MR. BLETCHER:

Re: your committee on Judiciary, having had under consideration SB 130 (first reading copy - White), respectfully report that 21, 131 do pass.

DO PASS

Signed: \_\_\_\_\_  
Ernest D. Clippard

J.C.  
1126189  
3:48  
P.M.

P.O. Box 1099

Helena, MT 59624

406/449-

Testimony in Support of SB 177

January 25, 1989

*Brenda Nordlund*  
Overview

Rationale for SB 177

1. If paternity is not established, child support obligations cannot be established and the state and federal government lose any means of recouping public assistance dollars, including AFDC and Medicaid, from absent parents.
2. Size of caseload and size of staff deter expeditious establishment of paternity in IVD cases, if the same must be established exclusively in district court.
3. The Family Support Act of 1988 requires HHS Secretary to set standards for measuring the state performance in establishing paternity of children receiving AFDC or IV-D child support services.

FAILURE TO MEET THE PERFORMANCE STANDARDS COULD RESULT IN FINANCIAL SANCTIONS, RANGING FROM 1 TO 5% OF FEDERAL REIMBURSEMENT FOR AFDC.

The Act further encourages each state to implement a simple civil process for voluntary acknowledgment of paternity, and a civil procedure for establishing paternity in contested cases.

4. Oregon experience with administrative determination of paternity shows that:

- 30% of cases will be resolved by voluntary acknowledgement
- 10% of cases will be resolved following voluntary blood test
- 50% of cases will proceed to probable cause hearing and compelled blood test
- 10% of cases will be referred to district court

Survey of Other State Laws

Sixteen states allow an administrative body to conclusively establish paternity where both parents acknowledge.

Eleven states permit the resolution of paternity against party refusing to obey an order for blood testing, or by refusing to appear for scheduled blood testing. An additional four states permit resolution of paternity against party refusing to participate in process at any phase (not specifically for blood testing).

This is similar to Rule 37(b)(2) sanctions under federal and Montana rules of civil procedure.

SENATE JUDICIARY

EXHIBIT NO. 1, p. 2

DATE 1-25-89

BILL NO. SB 177

FORD

P.O. Box 1099

Helena, MT 59624

406/449-7917

Eight states establish, by statute, rebuttable presumption of paternity, based on probability of paternity from ordered blood tests. (Range 95% to 99%) One state has established presumption by case law. Utah: 95%.

Three states permit admission of blood test results into evidence upon affidavit of the expert. (Oregon, Washington and Wisconsin)

California permits exclusion of other issues from paternity case.

California and Washington specifically exclude the administrative agency from having to pay fees for guardians ad litem and appointed counsel for indigent defendants.

APPENDIX B  
Scientific Testing  
For Paternity Establishment

## INTRODUCTION

The problem of disputed parentage and the search for ways to resolve it are not new. Japanese folklore of the 12th century describes methods for dealing with genealogical controversy: "In those times any person claiming to be an heir to an estate was required to undergo a blood test. The finger of the individual making the claim was pricked and a drop of blood was permitted to drip on the skeleton of the deceased. If the blood soaked in, the claim was upheld."<sup>1</sup> In still another test, two persons who claim to be related were required to allow drops of their blood to drop into a basin. Their relationship was recognized only if their respective drops of blood merged in the basin.

Tests used to establish or disprove relationship have grown increasingly sophisticated over the years. In particular, tests of the paternal relationship have profited from the scientific advancements of the last 25 years. Today, the possibility of excluding a falsely accused man is greater than 90 percent and is sometimes as high as 99 percent.

It is fortunate both for children and for the men who father them that these advances have been made in the science of genetic identification. Today, the paternity trial is more than a credibility contest. Evidence is available--and widely used throughout the court system--that minimizes the guesswork involved in determining the parentage of a child. If a man is falsely accused of fathering a child, genetic testing can prove his innocence 99 percent of the time, depending on the content of testing. Moreover, this conclusive and readily available evidence is relatively inexpensive, especially when the cost of blood tests (usually no more than \$400 for a full battery of tests, which is not always necessary) is balanced against the cost of supporting a child for a period of 18 years.

In addition, tests which indicate that a man may have fathered a particular child may be interpreted further to determine the likelihood that he did father the child in question. While statistical estimates of plausibility, or "inclusionary" evidence, are not accepted as widely throughout the court system as determination of exclusion are, these estimates are extremely reliable. In particular, when considered together with other evidence of relationship, genetic evidence of this kind can turn an essentially subjective determination into a far more objective and verifiable proceeding.

This appendix discusses the genetic basis of paternity testing and reviews the tests most often used for paternity establishment, which include the red blood cell antigen, the human leukocyte antigen, and the red cell enzyme and serum protein tests (more commonly referred to as electrophoresis). A description of the technology used in the tests and the strength of the testing results also is provided.

Other issues examined include various approaches for determining and expressing probability rates (the likelihood that a man is the father of the child); standards for blood testing laboratories as specified by the American Association of Blood Banks (AABB), and current research on technology for paternity testing.

## THE GENETIC BASIS OF PATERNITY TESTING

A basic understanding of the laws of heredity is needed to comprehend how genetic principles are applied to parentage testing. All human traits are determined by genes inherited from both parents, including both red and white cell blood types. At conception, the mother's egg, which contains 23 chromosomes, combines with the 23 chromosomes contained in the father's sperm. As a result, the child inherits 46 chromosomes which are paired in 23 sets. Within each set, one chromosome is inherited from the mother and one from the father. These chromosomes contain the genetic markers that determine all inherited characteristics. Since children inherit half of their genetic markers from their mother and half from their father, deductions can be made regarding which genetic markers are paternal in nature when the mother's and child's genetic markers are known. Because the components of human blood contain many of these inherited and identifiable genetic markers, it is possible to use blood tests to determine parentage.

Of course, it is possible for a man who is not the biological father of a particular child to possess genetic markers that appear in the child. However, it is extremely unlikely that he will possess by sheer chance a large number of genetic markers that appear in the child. For this reason, paternity blood tests examine independent groups (or "systems") of genetic markers in the blood of the child, mother, and alleged father.

Knowing the variations in any one marker that are present in the blood of the mother and the child, one can specify the range of variations that may appear in the blood of the biological father. If the variations observed in the blood of the alleged father do not fall within this range, he may be excluded from paternity.

When the blood of the alleged father contains the genetic markers that are required to be present in the blood of the biological father, he cannot be excluded from paternity. Moreover, because gene frequencies have been determined for diverse populations, specialists can predict with great accuracy the likelihood that a given man actually is the biological father of a child, and not just someone who happens to share the same blood characteristics with an unrelated individual.

Other factors that make the identification of genetic markers very effective in paternity determination are as follows:

- They are expressed at birth or shortly thereafter.
- They remain stable through life and are unaffected by extrinsic factors such as age, illness, diet, etc.
- They can be identified relatively easily through scientific tests which allow both accurate and reproducible identification.<sup>2/</sup>

The scientific techniques that have been developed can provide statistically reliable data necessary to establish a child's parentage. Consequently, the scientific testing has transformed the paternity establishment process from a credibility contest to a conclusive, fact-oriented proceeding.

## RED BLOOD CELL ANTIGEN TEST

At the beginning of this century, Dr. Karl Landsteiner's discovery of the ABO blood group system provided the basis for paternity testing as we know it today. As additional blood group systems such as MNSs, Rh, Kell, Duffy, and Kidd were discovered, the potential use of blood groups in paternity establishment increased. While these systems are commonly referred to as "blood groups," the term technically refers to antigens present on red cell membrane to which the body reacts by producing antibodies.

In testing blood group systems, red blood cells are exposed to a specific antibody under controlled conditions, and the cells then are examined for a reaction of the antigen to the known antibody. The absence or presence of the antigen is determined according to the absence (negative reaction) or the presence (positive reaction) of agglutination (clumping). A laboratory technician can determine whether a reaction has occurred by examining the antigen-antibody mixture in the test tube over a magnifying mirror.<sup>27</sup>

For example, when testing the ABO system, a reagent which contains the known antibodies that will react to A, B, AB, and O red blood cells are introduced to the antigen on the red blood cell. Group A red blood cells will react only to anti-A antibodies; group B red blood cells will react only to anti-B antibodies; group AB red blood cells will react to both anti-A and anti-B antibodies; and group O red blood cells will react to neither. Similar test procedures are used with the other blood group systems. Since the reactions that should occur when specific antigens are present on the red blood cells are known in the medical field, a laboratory technician can determine the typing of the antigens.

Unfortunately, red blood cell antigens are not distributed in the population with sufficient variation to allow medical experts to draw valid conclusions regarding the probability of an individual's paternity. Consequently, if the red blood cell antigen test does not provide exclusionary evidence (data that determines that the man is not the father of the child), the statistical probability of inclusion of parentage (likelihood that the man is the father of the child) is not admissible in evidence. As a result, the use of red blood cell antigen test results was limited to exclusionary evidence for many years.

While the red blood cell antigen test is not self-standing for purposes of inclusionary evidence, both the medical and legal communities recommend that the test should be performed first when testing for paternity determination. If a man can be excluded in this way, no further tests are required. The red blood cell antigen test is relatively simple to perform and inexpensive in comparison to other testing procedures. Moreover, if exclusion cannot be established at this first stage, the test results can be incorporated with those of additional tests to obtain inclusionary evidence.

## RED CELL ENZYME AND SERUM PROTEIN TEST

Tests which are gaining increasing respect as a reliable scientific measure for parentage determination are the red cell enzyme and serum protein tests. Serum is a complex solution containing a number of proteins; these proteins are composed of amino acids, each of which has a slight electrical charge. As with blood cell structures, the information for the production of these proteins is determined genetically.

Placed in an electric field, proteins will migrate at a rate proportional to their electrical charge and size. The rate of migration can be controlled by varying the

medium--the denser the medium the slower the migration of large proteins. By selecting the appropriate current and medium, a wide range of proteins can be separated. Electrophoresis is the procedure used to separate protein molecules based on their size and electrical charge. In practice a small amount of sample is placed on an electrophoresis plate along with known standards and the current applied for a prescribed length of time. The plate is then stained to reveal the location of the various proteins and the migratory distance of the unknown is compared to a standard to identify the genetic type.<sup>4,7</sup>

The reasons for interest in this testing are many. The migration patterns which are measured and compared to known standards are easy to read. In addition the slides can be dried, which allows a permanent record and physical evidence which can be presented in court by an expert witness. An additional advantage to using this type of testing is that rare variants can be identified through their migration rate, so there is no extra labor involved in locating them. Assume, for example, that a rare variant is found 1 in 1000 times in a system (a not unreasonable assumption). If one is testing 10 systems, a rare variant in one of the systems will occur 1 in 100 times. If this variant is passed on to the child, parentage is relatively assured.<sup>3,7</sup>

As in other types of testing, new protein systems that have fairly evenly distributed gene frequencies are being discovered . Some of the more common systems in use now are phosphoglucomutase (PGM), adenosine deaminase (ADA), esterase D (EsD), 6-phosphogluconate dehydrogenase (6-PGD), and group-specific component (Gc). As new systems are being added, the red cell and serum protein tests are becoming more powerful as probability rates for both exclusion and inclusion are increasing.

Blood testing laboratories are finding that if a man is not the father of a child, the chance of his being excluded on the basis of this test runs anywhere from 80 to 85 percent. However, if the testing results are combined with those of the red blood cell antigen test, the exclusionary rate is between 89 and 96 percent. Because the cost of performing enzyme and serum protein testing can be half that of HLA testing and because the test results are becoming more accurate as new systems are discovered, serum protein testing is becoming more popular with the medical and legal communities.

Since the technical procedure used for this testing is quite different than that used for the red blood cell antigen test and the HLA test which will be discussed later, technicians require specialized training to perform this test. Furthermore, laboratories must have specific equipment. Consequently, many laboratories in this country still do not have the facilities or resources to perform electrophoretic testing. However, more laboratories have or are in the process of obtaining this technical expertise in order to provide it as part of their battery of tests.

**HUMAN LEUKOCYTE ANTIGEN TEST**

In principle, HLA testing is similar to red blood cell antigen identification since it involves a reaction of all surface antigens to a specific antibody. However, the antigens tested are those found in the white blood cells (leukocytes) as well as all nucleated cells, rather than antigens found on the red blood cell. HLA structures are of primary importance in matching donors to recipients for organ transplantation. For this reason,



they also are known as tissue antigens, transplantation antigens, or histocompatibility antigens. Like an individual's red blood cell antigen types, the white blood cell antigen types are genetically controlled.

Four subclasses of antigens are used to define an individual's tissue type. The genes coding for each white blood cell antigen type used in HLA testing are found at three closely linked locations (or loci) on the sixth pair of chromosomes. They are termed HLA-A, HLA-B, and HLA-C. At conception, an individual inherits one complete set of genes (A, B, C), known as a haplotype, from each parent. By testing the white blood cells for the presence of antigen markers determined by gene codes at the HLA-A, B, and C loci, technologies can determine the phenotype of the individual tested. From the phenotype, the genotype (the haplotype derived from the individual parents) can be inferred.<sup>57</sup>

In HLA testing, the white blood cells are exposed to known antibodies and reactions of the antigen-antibody mixture are observed to determine the identity of the antigens. While agglutination is the reaction observed in red blood cell antigen test, cytotoxicity or cell death is the reaction observed in the HLA test. More specifically, human leukocyte antigens are tested by separating the white cells from whole blood to determine the specific ability of an antibody to kill the white cell. This testing is performed by separating the white cells from the other cells and mixing them together with known antibodies and complement (which is important for the reaction). After appropriate incubation, reactions are detected microscopically using a dye as an indicator. If there is dye inside the white cells, they have been killed since cell walls become permeable on death, and foreign substances (such as dye) can enter the cell. If the cells remain alive, they are intact, and the dye cannot penetrate the cell. Approximately 180 antibodies exist, including at least two antibodies for each antigen tested. Therefore, 180 separate tests per person must be completed to reach a conclusion as to the actual tissue type of an individual.

There are several drawbacks to HLA testing. As mentioned earlier, for complete typing for HLA, serological and genetic analyses of the antigens require at least 180 antibodies, which makes the procedure labor-intensive. In addition, the reagents necessary for the test are rare, so the entire process is quite expensive. Furthermore, the blood must be analyzed within 24 to 72 hours after it is drawn because the cells will die if they are not separated rapidly from the blood. Consequently, most HLA typing is confined to a relatively few large facilities.

The major advantage of HLA testing is that it is very polymorphic (i.e., genetically rich). The large number of markers in each of the three gene groups (alleles) A, B, C is so great that a large number of variations occur in the population. Moreover, any one variation has a very low frequency of occurrence. Consequently, HLA is a valuable test not only for exclusionary purposes, but for inclusionary purposes as well. "If the red blood cell antigen tests fail to exclude the alleged father and if his leukocyte variations match those of the child, it can be shown that he is a member of a class of, say 2 percent of the population that could have fathered the child--or stated another way, that there is a 98 percent chance that he fathered the child. If other factors, such as access to the mother, are taken into account, the question of paternity can be resolved under law."<sup>27</sup> Using the HLA test alone, it is possible to exclude over 90 percent of falsely accused men and to indicate those men who are highly likely to be the biological father. Combined with the red blood cell antigen test results, the percentage can be as high as 99 percent.

## NEW TECHNOLOGY FOR PATERNITY TESTING

The three types of testing most often used in paternity establishment (red blood cell antigen testing, HLA, and the enzyme and protein test) all involve analysis of genetic markers that represent inherited genetic characteristics rather than looking directly at a person's genetic makeup. One system being studied for paternity testing that is linked more closely to direct genetic composition is the chromosome banding test. In this procedure, approximately 10 white blood cells are selected for study and cultured in flasks. Different staining techniques reveal the chromosome bands. Differences in banding patterns are usually present in four to six of the 46 chromosomes in each cell. These patterns are heritable. "The chances of excluding a man who is wrongly accused as the father of a child with the chromosome banding method probably approach 100 percent."<sup>2</sup>

Another testing procedure currently in the research stage is deoxyribonucleic acid (DNA) probes. This new technique looks directly at a person's genetic composition, DNA. In simplified form, the process works as follows: "The DNA is extracted from white blood cells and divided into pieces by means of a specific enzyme, a chemical scissors that cuts the DNA only at specific sites. The number of these sites present in an individual's DNA dictates the number and size of DNA fragments generated by the enzyme. When this process is repeated with several enzymes, each of which cuts at different sites, enough information is gathered to construct a detailed genetic fingerprint of a person. Paternity is then determined by comparing the accused man's genetic fingerprint with that of the child."<sup>2</sup>

The advantages of these new methods is that no two people have the same genetic make up (except identical twins). Thus, it is hoped that as the procedures are perfected, they will be more accurate than any currently available. Presently, however, neither the chromosome banding nor the DNA probe method have passed the test of legal acceptance. Furthermore, both methods are expensive and not readily available. However, as research continues, and as other genetic factors are being tested for their appropriateness in paternity testing, it seems possible that both exclusionary and inclusionary rates will increase dramatically in the future.

## GUIDELINES FOR PATERNITY BLOOD TESTING

In 1976, a joint committee of the American Medical Association (AMA) and the American Bar Association (ABA) recommended guidelines for paternity blood testing. These guidelines are directed toward obtaining meaningful exclusionary or inclusionary evidence, and take into account the relative advantages and disadvantages--as well as the resolution power--of each technique discussed. Based on their findings, the committee concluded the following:

It is not the intent to recommend in all medico-legal problems of disputed parentage that the entire set of tests is mandatory. It is often possible to establish exclusion with the basic blood group systems (ABO, Rh, and MNSs). When these basic tests do not allow exclusion, extended testing may be done (using Kell, Duffy, and Kidd systems) to increase the mean probability of exclusion to the 63 to 72 percent level. If no exclusion is found, testing by human leukocyte antigens or electrophoresis should proceed until at least 90

percent, but preferably, 95 to 99 percent, of all wrongly accused men are excluded.<sup>10/</sup>

Exhibit A, which outlines the available methods of paternity testing discussed earlier, supports the AMA/ABA guidelines. To increase efficiency, paternity tests are taken sequentially, using first an approach that yields a 90 percent or better chance of exclusion.

- The combination of red cell antigens with enzymes and proteins has substantially the same efficiency of exclusion as the combination of red cell antigens with HLA; each provides a likelihood of exclusion of greater than 90 percent.

As the table indicates, use of all systems yields a probability of exclusion of 99 percent. However, it is neither practical nor efficient to utilize all three groups routinely for the following reasons:

- The different groups of tests utilize different skills and techniques. At present, very few laboratories offer all the systems.
- The cost of testing all systems and the inconvenience of submitting specimens to several laboratories is considerable.

Regardless of whether one starts with red cell antigens plus enzymes and proteins, or white cell antigens (HLA), exclusion of a falsely accused man will be made 90 percent of the time. If the tests used indicate a sufficiently high probability of paternity, no further testing may be required. If the results are inconclusive, further analyses may be desirable. Use of all tests will result in an overall exclusion of 99 percent as indicated by the table.

## INTERPRETATION OF PATERNITY TEST RESULTS

As recommended by the AMA/ABA, laboratories should be able to exclude at least 90 percent of falsely accused men based on test results. In general, laboratories that specialize in paternity testing advertise the strength of their tests according to Probability of Exclusion (P.E.)--that is, the probability that a given test or combination of tests will exonerate a falsely accused man. The Probability of Exclusion should not be confused with Probability of Paternity, which is a statement expressing the likelihood of paternity in a particular case. They are independent concepts and are mathematically unrelated.

Every genetic system has an associated P.E. For the ABO system, the P.E. is roughly .17; for MNs, it is .32, etc. For HLA, it ranges from .88 to .92, depending upon the number of different test antibodies used. "The HLA test is the best single system in terms of having the largest P.E., but is not the best test. The best test would be one which would give a total P.E. of better than 99 percent. In fact, any combination of systems which can give a total P.E. of .88 to .92 would equal the HLA test in the ability to detect falsely accused men."<sup>11/</sup> Thus, two separate laboratories may use the same techniques in testing but have different P.E.s depending on the level of testing. Consequently, when selecting laboratories and methods of testing, paternity workers

Exhibit A

SUMMARY OF AVAILABLE METHODS OF PATERNITY TESTING\*

<u>Group</u>	<u>Systems</u>	<u>Experimental Technique</u>	<u>Probability of Exclusion Using Systems In Group</u>
Enzymes and Proteins	AcP, AD, EsD, Bf, Gc, Hp, PGM, Tf, GPT, 6-PGD, ADA	Electrophoresis	.70 - .85
Red Cell Antigens	ABO, Rh, MNSs, Kell, Duffy, Kidd A & B	Agglutination	.63 - .72
White Cell Antigens	HLA-A, HLA-B	Complement-Mediated Cytotoxicity	.85 - .91

.91 - .97	.99
.91 - .99	

\* Reprinted from "Blood Testing," OCSE TEMPO 4: U.S. Department of Health and Human Services, April 15, 1980. This summary is taken in large part from a pamphlet prepared by Paternity Testing Laboratory, Department of Pathology, Memorial Hospital Medical Center of Long Beach, California, and reprinted with the permission of Jeffrey Morris, M.D., Ph.D. No official support or endorsement of the laboratory or any one blood testing group, system, or technique by the Office of Child Support Enforcement, DHHS, is intended.

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should base their selection on the P.E. that the laboratory offers, rather than the method of testing implemented.

### Exclusionary Methods

While absolute proof of paternity cannot be established by scientific testing, exclusion of paternity is considered absolute if results are based on direct exclusion (Class I) or on indirect exclusions (Class II). Direct exclusion refers to testing results which demonstrate that the child possesses a genetic marker lacking in both parents. For example, in using the ABO system, a direct exclusion is obtained when the child types as B, and both the biological mother and alleged father type as O. Since neither the mother nor the alleged father can contribute the B gene (and there are almost no exceptions to this rule), this information constitutes a direct exclusion and is considered adequate evidence for nonparentage.

Indirect exclusions are obtained if the child does not possess a genetic marker that he or she should have received if either parent was homozygous (the two genes in a pair being identical) for this marker. For example, in using the MNSs system, the mother may type as an MN, the alleged father as an M, and the child types as an N. The child would appear homozygous for the N gene, which the father appears to lack. In addition, the alleged father appears homozygous for the M gene which the child lacks. However, the alleged father may possess the rare gene Mg which the laboratory could detect only by using a specific reagent that would demonstrate the rare factor and distinguish between the homozygous state (exclusion) and the presence of the rare factor in the child and the alleged father (nonexclusion).<sup>12'</sup> Often, these reagents are not available, and laboratories resort to testing other systems that may reveal direct exclusion.

Thus, the distinction between direct and indirect exclusion is that in direct exclusion, the child carries a genetic marker which is not demonstrated in either the biological mother or the alleged father, while indirect exclusion is based on an assumption that either of the parents is homozygous. While people may appear homozygous, genetic abnormalities may produce inaccurate results. Gene mutations, recombination of unexpressed genes that leave unexpressed antigens, are examples of rare factors that would require additional testing with the specific reagents that are often not readily available. Consequently, many laboratories find it necessary to find exclusion in at least two different genetic systems before excluding parentage with confidence. Multiple system exclusions are always desirable and are necessary for an unqualified statement of exclusion when indirect exclusions are involved.

### Inclusionary Methods

When a man is not excluded from parentage, statistical calculations can reveal the Probability of Paternity (sometimes referred to as the likelihood or plausibility of paternity). How the calculations are made is perhaps the most controversial issue in the paternity testing field because there are several methods of calculations used. Each method is based on a different premise, though each premise is itself mathematically sound.

Prior probability. The most often used calculations in paternity testing are based on Bayes' Theorem, a mathematical statement about the effect new information has on previously held beliefs about "chances." This method relates the probability of an item (alleged father) with certain attributes (genetic markers) being a member of a particular

group (biological father) to the probability that a known member of the group would have the same attributes.

The most often used calculations use a neutral prior probability--that is, that a random man and the alleged father had an equal opportunity to father the child. The rationale for using a neutral prior probability rate is that an impartial laboratory should not assess the value of nongenetic information. Since the laboratory has no knowledge of the evidence, most laboratories assign a neutral estimate of 0.5 from a scale of 0-1 (ranging from impossible to certain) which is indicative of a particular event having occurred. The Essen-Moller calculation (the one recommended by the AMA), and the Hummel modification, which expresses the likelihood of paternity in a percentage, both imply a neutral prior probability.

This impartial calculation has implications for the paternity worker. Blood testing laboratories are not privy to all the information on a particular case and cannot weigh the laboratory results relative to other factors. The person who can evaluate the case is the worker and/or attorney who has been working directly with the mother and the alleged father. Consequently, the paternity worker must be able to recognize special situations in which this parameter of prior probability has a greater or lesser meaning.

The Neyman-Pearson Theory argues that weighed prior probability is appropriate. The following example supports weighed prior probability: "A bite is inflicted in a blackout in Times Square. Given the nature of the two animals, a tiger is more likely to bite one than a dog; but tigers are much scarcer in Times Square. While the probability that a dog would bite one is less than 1 percent, and would lead to rejecting the null hypothesis that the miscreant was a dog, it does not lead the rational mind to decide that, after all it probably was a tiger."<sup>13/</sup>

As shown, there are pros and cons in using both weighed and neutral prior probability. Perhaps a statement by Hummel best explains why a neutral prior probability rate is recommended by AMA/ABA:

Equality before the law requires that if a man denies a child's allegation that he is the child's father, these two claims must be treated as equal. The probability of his being the father is the same as that of not being a father. Accordingly, in cases involving one man the prior probability of paternity should be 0.5. The legal philosophy behind this prior probability cannot be challenged so long as the legal rights asserted by the child are valued as highly as those defended by the man.<sup>14/</sup>

Calculation of probability of paternity. As mentioned previously, there are numerous methods that can be used in calculating inclusionary evidence. The following is an explanation of the method recommended by the AMA/ABA and which assigns neutral prior probability:

The paternity index is a calculation which estimates the possibility that the tested man might be the father of the child. The paternity index indicates how many men of the same background as the alleged father would have to be tested to find another man who could be the father of the child. Several factors are taken into account when determining this number. First, each of the genetic systems that can be passed on by the alleged father to the child are tested. In other words, what needs to be determined is whether the

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alleged father's sperm have all the necessary characteristics to pass on to the child in question. If so, the calculation needs to consider whether all his sperm or only some have the necessary characteristics. The answer to this question will depend on whether the man is homozygous or heterozygous.

The gene frequency is based on how many men of similar ethnic background as the alleged father would have to be tested to find another man who could be the father of the child in a random population. Gene frequency tables are based on laboratory tests of several thousand individuals that have been selected at random, and are calculated for racial populations. Typically, these tests are done in paternity cases (from blood donors, etc.) and are compared with other laboratories.

To illustrate how this calculation is computed, first assume that if the alleged father is homozygous, his genotype is AA. This means that all his sperm have the necessary characteristics to pass on the A gene 100 percent of the time. If he is heterozygous, his genotype being AO, his sperm have the appropriate characteristics to pass on the A gene 50 percent of the time.

X = chance of sperm having A  
If a man is AA (homozygous), X = 1  
If a man is AO (heterozygous), X = .5

The next step in determining the paternity index is to calculate how frequently another man at random also will be able to contribute the A gene that the child has--that is, if such a person were to have had a sexual relationship with the mother, how often would this occur. For example, assume that the frequency of the A gene occurs in a random population 25 percent of the time. Therefore, the other characteristic, O, occurs with a frequency of 75 percent. If an A gene has a 25 percent chance of occurring, and A is the characteristic we are testing for, we would determine the ratio of X (the chance of the sperm having A) over Y (the frequency that A occurs in the random population). When the man is homozygous, X = 1, and if A has a frequency of 25 percent, one divided by 25 percent or X over Y equals 4. If, on the other hand, the man is heterozygous, then X = .5, and X divided by Y would be equal to 2.

X = chance of sperm having A  
Y = gene frequency for A

If A = .25, therefore O = .75

If X is 1.0 (man is homozygous)  
1/.25 or X/Y = 4

If X is .50 (man is heterozygous)  
.50/.25 or X/Y = 2

This calculation is done for each specific system since the true biological father of the child must contribute all the paternal genes, and, of course, the alleged father is able to pass each such gene to his offspring. In order to determine the paternity index, the resulting numbers from each system tested (each X/Y) are then multiplied together.<sup>13/</sup>

The paternity index reflects the number of random men who would have to be tested in order to find another man who could have fathered the child in combination with the mother. The paternity index number is used to determine likelihood value of paternity. The likelihood value of paternity is calculated by dividing the paternity index number and the paternity index number plus 1 and multiplying by 100 to get a percent (e.g., P1/P1+1 x

100). The calculation gives a percent basis of how many more times it is likely that the man who has been tested could be the father versus some man picked at random who has not been tested.

This method of calculating probability of paternity is employed by the majority of parentage testing laboratories in the United States and Europe, and it is the method most familiar to the American court system. However, there has been some criticism. For example, Dr. Mikel Ackin argues that "the [probability] figure is not, in fact, the probability that the alleged father is the true father." In addition, he maintains that assumptions (sometimes self-contradictory) affect the denominator of the likelihood ratio used in the calculation and that speculation about genotypes that does not constitute scientific evidence are used in post inclusionary calculation. Dr. Aikin's arguments against paternity probabilities originally appeared in an article entitled "Some Fallacies in the Computation of Paternity Probabilities," published in the American Journal of Human Genetics.<sup>16</sup> Appendix C includes a summary of his argument and a rebuttal to the original article by Dr. Richard H. Walker.

## SELECTING A BLOOD TESTING LABORATORY

When selecting a blood testing laboratory, the foremost consideration is whether the laboratory performs a sufficiently detailed series of tests to exclude most wrongfully accused men. The AMA/ABA Guidelines recommend a rate of 90 to 95 percent. Furthermore, in cases where an exclusion is not achieved, the persuasiveness of the inclusionary evidence is tied directly to the probability of exclusion that has been rendered by the battery of tests. In addition, one should not rely solely on a lab's advertisement that it performs both HLA and enzyme/protein tests. The probability of exclusion is tied to the number of factors and variations tested within each category of testing; different labs test different numbers and combinations of factors. There are other considerations as well, and these are discussed below.

Ability to handle required volume. The IV-D agency should determine in advance whether the lab can support the anticipated volume of work. Procedures and protocol at blood testing labs can be matters of significance during paternity trials, and the agency must make sure that the lab understands its needs in this area.

Provide service at a reasonable cost. Generally, labs that perform red blood cell enzyme and serum protein tests are less expensive than labs that perform HLA tests. The relatively flexible handling requirements for the enzyme and serum samples permit one to use labs anywhere in the country.

Provide expert testimony in selected cases. Expert testimony can be required during disputed paternity trials. In most States, extremely few paternity cases go to trial. Blood test reports can be particularly useful in encouraging a negotiated settlement. In the estimated five or six percent of disputed cases which finally must be tried, it is highly advantageous to have medical evidence available showing the likelihood of paternity based upon genetic resemblance of the accused father and the child.

Provide effective quality control procedures. The lab's method of certifying and reporting test results also should be agreed upon in advance. Such practices as duplicate testing for key factors by different technicians should be encouraged and discussed if they are performed. Test reports that list all tests performed and provide detailed discussions



of any factor that may result in an exclusion should be required. If no exclusion is achieved, test reports should include calculations of the probability that a wrongly-accused man would have been excluded, and possibly a calculation of the probability of paternity based on the test results. Expert testimony, either in person or by deposition, also should be available.

**Provide adequate chain of custody.** Chain of custody refers to the possession and control of the blood samples from the time they are drawn until the time the blood is analyzed. Selecting a lab requires careful inquiry concerning methods used to identify the parties and procedures used to label and seal blood specimens. Adequate precautions should be taken at every stage of the proceeding to lessen the risk of basing results on the wrong samples.

## **PROCEDURES FOR BLOOD TESTING LABORATORIES**

The clinical laboratory plays an important role in cases of disputed parentage. Because of the legal aspects of scientific testing, precautions must be taken to ensure that the test results will be admissible as evidence in court. Consequently, such tests must be conducted with accepted techniques by qualified personnel and in such a way as to ensure the correct identification of the parties involved. Also, the chain of custody must be documented properly. The procedures followed by some laboratories are outlined below.

**Step 1: Referring.** Most laboratories will not perform any testing unless a case is referred by a lawyer, physician, judge, or an appropriate welfare agency.

**Step 2: Scheduling.** There are two alternatives to scheduling the parties to a paternity case for drawing the blood to be tested. The first alternative, if convenient, is to have everyone appear at the same time, to identify each, and to witness the drawing, labeling, and sealing of the blood specimens. The second alternative is to have the alleged father arrive before the mother and child to avoid any unpleasant scenes. If the second alternative is selected, the alleged father typically should be photographed before any blood is drawn and asked to sign his photograph before a witness. Some laboratories also take thumb prints. When the mother and child come to have their blood drawn, the mother should be asked to identify the alleged father and initial his photograph.

**Step 3: Verifying the donor's identity.** Regardless of which alternative is selected for scheduling blood tests, samples can be obtained, confirmed, and labeled so there is not doubt later whether the samples were drawn from the right individual. At least 2 pieces of identification (such as a driver's license, social security card, or birth certificate) should be required from all parties.

Prior to obtaining the blood samples, laboratory staff should counsel all parties to explain the procedure and the implication of the results. Appropriate consent forms should be completed, and a photograph and thumb print of each party should be obtained for the purposes of identification and later court use if necessary.

**Step 4: Drawing the blood specimen.** Blood must be drawn in sufficient quantity for the particular tests to be performed. Most blood typing procedures require only miniscule amounts of blood. Because it is difficult to obtain any significant volume of blood from a newborn infant (the child's veins are too small to locate), many laboratories

require that a child be at least 6 months old and in good health before they will attempt to obtain a blood sample. In addition, a child under 6 months may possess maternal genetic markers which were transmitted across the placenta while the child was in the uterus. A similar situation occurs when a person receives a blood transfusion. A laboratory should ask a donor if he or she has had a transfusion and how long ago the transfusion occurred; a blood specimen should not be taken unless 3 months have elapsed since the transfusion.

If the laboratory performing the test was not responsible for drawing the blood, it is extremely important that the samples are labeled and sealed immediately after venipuncture and withdrawal. For the convenience of the parties, it is not at all uncommon for the blood to be drawn at a local hospital or physician's office and then shipped to the testing center. The major problem this imposes is that the blood must arrive in a condition suitable for analysis and chain of custody must be documented carefully. For HLA testing, this usually means delivery within 24 hours. The red blood cell components are hardier and can be tested several days after the blood is drawn. If non-HLA testing is performed, the blood may be delivered to the laboratory by ordinary mail. In fact, many laboratories provide insulated mailing containers for this purpose. It is recommended, however, that blood always should be drawn and shipped early in the week to avoid any unnecessary delay caused by storage over the weekend. Also, there must be no possibility of tampering with the specimens or confusion with others stored in the same area. These precautions should be standard operating procedures in a laboratory experienced in the handling of blood for paternity testing.

**Step 5: Documenting the chain of custody.** The chain of custody is initiated by the person obtaining the specimen and should be maintained by each succeeding person who handles it. Specimens are marked for identification by each person who handles them. Each exchange of a specimen from one person to another should be documented by both according to a specified protocol. A single chain-of-custody form accompanying the specimen should be used to record all of the above-described transactions. Many laboratories have prepared written procedures and designed forms to document the chain of custody, and each link in the chain of custody may be documented and proven by affidavit. These safeguards lessen the chance that the chain of custody will be challenged in court.

Until recently, child support enforcement programs had no guidelines or set standards to follow in the selection of a blood testing laboratory. However, in May of 1984 the American Association of Blood Banks (AABB) released their "Standards for Parentage Testing Laboratories." These standards apply to areas of personnel, policies, collection and identification of specimens, red blood cell antigen testing, HLA testing, red cell enzyme and serum protein testing and reports and calculations.

The personnel and policies section addresses the qualifications of the director and technical staff of the laboratory. It also covers various other aspects of the laboratory such as size, competency of staff, safety codes, storing and handling of reagents and blood specimens, testing methods, proficiency testing programs, use of reference laboratories, consulting with outside sources, and the development of a manual detailing all procedures and policies utilized by the laboratory.

The collection, identification, and documentation section specifies documentation vital to the legal and general laboratory aspects of the case, and requires the confidential maintenance of all case records. The standards for blood tests require the red blood cell

antigen testing to be performed in duplicate, by different technicians utilizing at least two reagents from different sources for each antigen tested. Each HLA test must be plated on two separate trays or tray sets, each containing a minimum of one monospecific or two multispecific sera defining HLA-A and B antigens. These trays must be read independently. The tests for the red cell enzymes and serum proteins also must be read independently by two different technicians.

The reporting and calculations section requires that the information provided to the requesting agency be sufficient to permit an understanding of the results with a minimum of difficulty.

In May 1982, the Office of Child Support Enforcement sponsored a forum to resolve of genetic test calculation issues.<sup>17</sup> More than 40 experts from 7 foreign countries and the United States convened at the International Conference on Inclusion Probabilities in Parentage Testing. The Conference was organized by the Committee for Parentage Testing of the American Association of Blood Banks. Attendees were selected for their knowledge and expertise in areas related to the calculation of parentage testing and included geneticists, statisticians, and lawyers. As a result of the Conference, uniform guidelines were established for reporting estimates of probability of paternity. These guidelines are included in Exhibit B. In addition, AABB standards were developed to assure any party involved in a paternity dispute that high quality laboratory standards were established and used. Any laboratory involved in paternity testing is eligible to request accreditation by the AABB. Once accredited, laboratories are reviewed annually. As a result of these new standards, much laboratory accreditation work is now being performed by AABB.

#### FOOTNOTES

- /1/ American Association of Blood Banks, Paternity Testing (New Orleans, LA: American Association of Blood Banks, 1978), p. vii.
- /2/ Howard Bragdon, Medical Technician, et al., "Parentage Evaluations: A Biological Analysis for the Legal Profession" (Nashville, TN: Dia Clin Laboratory, Inc.), p. 5.
- /3/ Baltimore Rh Typing Laboratory, Inc., "Genetic Markers Inheritance Paternity Rh Laboratory-Solution" (Baltimore, MD).
- /4/ Bragdon op. cit., p. 12.
- /5/ B.A. Myhre, M.D., Ph.D., "The Use of Genetic in Parentage Testing" (unpublished manuscript).
- /6/ Baltimore Rh Typing Laboratory, Inc., op. cit.
- /7/ Joel S. Kolko, "Admissibility of HLA Test Results to Determine Paternity," The Family Law Reporter, Monogr. 2, Vol. G, No. 15 (February 15, 1983).
- /8/ The Oregon Health Sciences University, Special Laboratory Services, "Paternity Testing" (Portland, OR).

- /9/ Madeline Chinnici, "Ultraprecise Paternity Test," Science Digest (December 1984), p. 22.
- /10/ American Medical Association/American Bar Association, "Guidelines for Paternity Blood Testing" (Washington, DC: 1976).
- /11/ Henry Gershowitz, Ph.D., "A Guide to Paternity Testing," National Legal Laboratories (Okemos, MI).
- /12/ Bowman Gray School of Medicine of Wake Forest University, "Policies and Procedures for Medicolegal Blood Testing in Cases of Disputed Parentage" (Wake Forest, NC: November 1982).
- /13/ Wilma B. Bias, Ph.D., et al., "Theoretical Underpinnings of Paternity Testing," Inclusion Probabilities in Parentage Testing (Arlington, VA: American Association of Blood Banks, 1983), p. 57.
- /14/ K. Hummel, "Gesellschaft for Forensische Blutgruppenkunde, e.v." Paper presented at 8th International Congress of the Society for Forensic Haemogenetics (London: September 1979), p. 237.
- /15/ Basic statistical theory holds that the combined probability of a string of independent events is determined by multiplying their individual probabilities. For example, if event A occurs once every 4 days at random, and event B occurs once every 4 days at random, the chance of choosing a random day and having both events occur is  $1/4 \times 1/4$  or  $1/16$ .
- /16/ Mikel Aickin, Ph.D., "Some Fallacies in the Computation of Paternity Probabilities," American Journal of Human Genetics 36: 904-915, 1984.
- /17/ Richard H. Walker, M.D., ed., Inclusion Probabilities in Parentage Testing (Arlington, VA: American Association of Blood Banks, 1983). (Symposium of the Airlie Conference held at the Airlie House, Virginia, May 1982.)

Exhibit B  
GUIDELINES FOR REPORTING ESTIMATES OF  
PROBABILITY OF PATERNITY\*

1. Testing of genetic markers in cases of disputed parentage should include multiple systems which will exclude most falsely accused men. If tests fail to exclude the alleged father, an estimate of the probability of paternity should routinely be calculated from the observed phenotypes of the mother, child, and alleged father.
2. One estimate that the nonexcluded alleged father could be the biologic father is a likelihood or odds ratio known as the Paternity Index (PI;X/Y). This compares the alleged father (X) with a random man (Y) in terms of their respective probabilities of providing an appropriate gene to the child in each of the genetic systems for which phenotypes have been determined.
3. The estimate of probability derived from the phenotypes of the mother, child, and alleged father should also be stated as a percentage expression (Probability value: W value; Likelihood; Plausibility; Relative Chance of Paternity). Since calculations to determine this estimate include a value for the prior probability, reports must state the prior probability(ies) used.
4. Other mathematical expressions may be derived from the observed phenotypes or other data. If they are included in the report, such expressions should be defined and explained.
5. Probability calculations should consider the racial origin of the mother, alleged father, and the random man. Gene frequencies should have been obtained by the examination of populations of adequate size. In some cases it may not be feasible to compare the alleged father with a random man because relevant and adequate gene frequency tables are not available.
6. Mathematical expressions of probability estimates may be accompanied by verbal predicates. If used, verbal predicates should be explained in the report.

\* Richard H. Walker, M.D., ed., Inclusion Probabilities in Parentage Testing (Arlington, VA: American Association of Blood Banks, 1983), p. xiv.

SENATE JUDICIARY

EXHIBIT NO. 3

DATE 1-25-89

BILL NO. SB 177

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

January 24, 1989

TESTIMONY TO SUPPORT SB 177

SENATE JUDICIARY COMMITTEE

Mr. Chairman, members of the Committee, I am Donald E. Espelin, M.D., Chief, Preventive Health Services Bureau, Department of Health and Environmental Sciences.

This bill will impact our Perinatal Program in a positive fashion. One of the major obstacles to early effective prenatal care is the funding. Who pays the bill? Since early effective prenatal care is the single most effective way to reduce low birthweight and infant mortality, we support efforts that will help pay the prenatal care bill. We feel this legislation will help identify responsibility and therefore aid in paying the bill for prenatal care.

DEE:cw

Amendments to Senate Bill No. 107  
First Reading Copy (WHITE)

Requested by Senator Mazurek  
For the Committee on Judiciary

Prepared by Valencia Lane  
(Kim Kradolfer and Tom Keegan)

(VERSION 1)  
BOARD OF PARDONS MUST MAKE A RECOMMENDATION TO  
GRANT OR DENY CLEMENCY

January 24, 1989

1. Title, line 7.

Strike: first "AND"

Insert: "THROUGH 46-23-303, 46-23-307,"

Following: "46-23-315,"

Insert: "AND 46-23-316,"

2. Page 1, lines 12 and 13.

Following: "clemency --" on line 12

Strike: the remainder of line 12 through "board." on line 13

Insert: "application for clemency -- definitions. (1) "Clemency" means kindness, mercy, or leniency that may be exercised by the governor towards a convicted person. The governor may grant clemency in the form of:

(a) the remission of fines or forfeitures;

(b) the commutation of a sentence to one which is less severe;

(c) respite; or

(d) pardon. "Pardon" means a declaration of record that an individual is to be relieved of all legal consequences of a prior conviction.

(2) A person convicted of a crime need not exhaust judicial or administrative remedies before he files an application for clemency."

3. Page 1, line 22.

Following: "court-appointed"

Insert: "next friend,"

Following: "guardian"

Insert: ", "

4. Page 1, line 23.

Following: "made"

Insert: ": (a)"

5. Page 1, line 25.  
Following: "convicted"  
Insert: " ; "  
Following: "and"  
Insert: "(b)"

6. Page 2, line 2.  
Following: "applicant"  
Insert: "prior to commission of the crime, at the time the offense was committed, and at the time of the application for clemency. Any recommendation made by the board shall be based on these two criteria"

7. Page 2, lines 4 through 9.  
Following: "taken."  
Strike: the remainder of lines 4 through 9 in their entirety  
Insert: "The board may recommend that clemency be granted or denied. In noncapital cases, if the board recommends that clemency be denied, the application must not be forwarded to the governor and the governor may not take action on the case. In capital cases, the board shall transmit the application and either a recommendation that clemency be granted or a recommendation that clemency be denied to the governor. The governor is not bound by any recommendation of the board, but he shall review the record of the hearing and the board's recommendation before he grants or denies clemency. The governor has the final authority to grant or deny clemency in those cases forwarded to him."

8. Page 2, line 10.  
Following: line 9  
Insert: " Section 2. Section 46-23-302, MCA, is amended to read:  
"46-23-302. Order for hearing on application for executive clemency. After the board has duly considered an application for executive clemency and has by majority vote favored a ~~recommendation of executive clemency to the governor hearing~~, it must pass an order in substance as follows:

"Whereas, the Board of Pardons has officially received an application for executive clemency concerning ....., a convict confined in the state prison (or to one ....., who has been found guilty of an offense committed against the laws of the state), who was convicted of the crime of .... committed at ....., in the county of ....., State of Montana, on the .... day of ....., 19.., and sentenced for a term of .... years.

Therefore, be it ordered that ....., the .... day of ....., 19.., be set apart for the consideration of said executive clemency matter; and all persons having an interest therein desiring to be heard either for or against the granting of the pardon ~~or reprieve~~, commutation, restoration of citizenship, or remission or suspension of fine or forfeiture are hereby notified to be present at .... o'clock of said day, at .....



Further, ordered that a copy of this order be printed and published in the .... (here insert name of some newspaper of general circulation in the county where the crime was committed), a daily (or weekly) newspaper printed and published at ....., in the county of ....., once each week for 2 weeks beginning ....., 19.., and ending ....."

Section 3. Section 46-23-303, MCA, is amended to read:

"46-23-303. Publication of order. The board must cause a copy of such order to be published in the newspaper therein designated at least once a week for 2 weeks prior to the hearing and, at the same time, cause to be deposited in the post office at the seat of government, postpaid, a copy of said order and notice addressed to the district judge, county attorney, and sheriff, respectively, of the county where the crime was committed and in like manner mail a copy of the order to the ~~petitioner and the convict~~ applicant.

Section 4. Section 46-23-307, MCA, is amended to read:

"46-23-307. Decision of board. Within 30 days after the hearing of any capital case or in noncapital cases where the decision is made to recommend clemency be granted, the board must make a decision in writing, and if such decision be made to recommend executive clemency, the copy of the decision together with all papers used in each case shall be immediately transmitted to the governor."

Renumber: subsequent sections

9. Page 2, line 11.

Following: "respite"

Insert: "-- application"

10. Page 2, line 15.

Following: "proper."

Insert: "The governor may grant a respite upon application of a person authorized to apply for executive clemency and prior to any review or recommendation by the board of pardons."

11. Page 2, line 23.

Following: line 22

Insert: " Section 6. Section 46-23-316, MCA, is amended to read:

"46-23-316. Governor's report to legislature. The governor must communicate to the legislature at each regular session each case of remission of fine or forfeiture, ~~reprieve~~ respite, commutation, or pardon granted since the last previous report, stating the name of the convict, the crime of which he was convicted, the sentence and its date, the date of remission, commutation, pardon, or ~~reprieve~~ respite, with the reason for granting the same, and the objection, if any, of any of the members of the board made thereto."

Renumber: subsequent sections

SENATE JUDICIARY  
EXHIBIT NO. 5  
DATE 1-25-89  
BILL NO. SB107

Amendments to Senate Bill No. 107  
First Reading Copy (WHITE)

Requested by Senator Mazurek  
For the Committee on Judiciary

Prepared by Valencia Lane  
(Kim Kradolfer and Tom Keegan)

(VERSION 2)  
BOARD OF PARDONS CAN RECOMMEND GRANTING OR DENYING CLEMENCY  
OR CAN MAKE NO RECOMMENDATION

January 24, 1989

1. Title, line 7.

Strike: first "AND"

Insert: "THROUGH 46-23-303, 46-23-307,"

Following: "46-23-315,"

Insert: "AND 46-23-316,"

2. Page 1, lines 12 and 13.

Following: "clemency --" on line 12

Strike: the remainder of line 12 through "board." on line 13

Insert: "application for clemency -- definitions. (1) "Clemency" means kindness, mercy, or leniency that may be exercised by the governor towards a convicted person. The governor may grant clemency in the form of:

(a) the remission of fines or forfeitures;

(b) the commutation of a sentence to one which is less severe;

(c) respite; or

(d) pardon. "Pardon" means a declaration of record that an individual is to be relieved of all legal consequences of a prior conviction.

(2) A person convicted of a crime need not exhaust judicial or administrative remedies before he files an application for clemency."

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Following: "convicted"  
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6. Page 2, line 2.

Following: "applicant"

Insert: "prior to commission of the crime, at the time the offense was committed, and at the time of the application for clemency. Any recommendation made by the board shall be based on these two criteria"

7. Page 2, lines 4 through 9.

Following: "taken."

Strike: the remainder of lines 4 through 9 in their entirety

Insert: "The board may recommend that clemency be granted, may recommend that clemency be denied, or may refer the application and record to the governor without recommendation. In noncapital cases, if the board makes no recommendation or recommends that clemency be denied, the application must not be forwarded to the governor and the governor may not take action on the case. In capital cases, the board shall transmit the application and any recommendation to the governor. The governor is not bound by any recommendation of the board, but he shall review the record of the hearing and the board's recommendation before he grants or denies clemency. The governor has the final authority to grant or deny clemency in those cases forwarded to him."

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Following: line 9

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"Whereas, the Board of Pardons has officially received an application for executive clemency concerning ....., a convict confined in the state prison (or to one ....., who has been found guilty of an offense committed against the laws of the state), who was convicted of the crime of .... committed at ....., in the county of ....., State of Montana, on the .... day of ....., 19..., and sentenced for a term of .... years.

Therefore, be it ordered that ....., the .... day of ....., 19..., be set apart for the consideration of said executive clemency matter; and all persons having an interest therein desiring to be heard either for or against the granting of the pardon ~~or reprieve~~, commutation, restoration of citizenship, or remission or suspension of fine or forfeiture are hereby notified to be present at .... o'clock of said day, at .....

Further, ordered that a copy of this order be printed and

published in the .... (here insert name of some newspaper of general circulation in the county where the crime was committed), a daily (or weekly) newspaper printed and published at ....., in the county of ....., once each week for 2 weeks beginning ....., 19..., and ending ....."

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"46-23-303. Publication of order. The board must cause a copy of such order to be published in the newspaper therein designated at least once a week for 2 weeks prior to the hearing and, at the same time, cause to be deposited in the post office at the seat of government, postpaid, a copy of said order and notice addressed to the district judge, county attorney, and sheriff, respectively, of the county where the crime was committed and in like manner mail a copy of the order to the ~~petitioner and the convict~~ applicant."

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Renumber: subsequent sections

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Following: "respite"

Insert: "-- application"

10. Page 2, line 15.

Following: "proper."

Insert: "The governor may grant a respite upon application of a person authorized to apply for executive clemency and prior to any review or recommendation by the board of pardons."

11. Page 2, line 23.

Following: line 22

Insert: " Section 6. Section 46-23-316, MCA, is amended to read:

"46-23-316. Governor's report to legislature. The governor must communicate to the legislature at each regular session each case of remission of fine or forfeiture, ~~reprieve~~ respite, commutation, or pardon granted since the last previous report, stating the name of the convict, the crime of which he was convicted, the sentence and its date, the date of remission, commutation, pardon, or ~~reprieve~~ respite, with the reason for granting the same, and the objection, if any, of any of the members of the board made thereto."

Renumber: subsequent sections

*Senate Bill No. 111*  
*in (see audit)*

**VERSION 2**

*prior to commission of the crime, at the time the offense was committed, and at any time of the application for clemency. Any request for extension of the Board shall be made by the applicant.*

1 INTRODUCED BY \_\_\_\_\_  
2 BY REQUEST OF THE DEPARTMENT OF JUSTICE  
3  
4  
5 A BILL FOR AN ACT ENTITLED: "AN ACT CLARIFYING THE LAWS  
6 RELATING TO EXECUTIVE CLEMENCY; AMENDING SECTIONS 46-23-301  
7 THROUGH 46-23-303, 46-23-307,  
8 AND 46-23-315; MCA; AND PROVIDING AN IMMEDIATE EFFECTIVE  
9 DATE."  
10 AND 46-23-316,

11 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:  
12 Section 1. Section 46-23-301, MCA, is amended to read:  
13 "46-23-301. Cases of executive clemency *application by*  
14 *clerk* *definition (1)* shall be investigated and reported to the *means* *see audit*  
15 majority of the board shall investigate and report to the *see audit*  
16 governor with respect to all cases of executive clemency. A  
17 majority of the board shall advise, investigate and approve  
18 each such case before the action of the governor shall be  
19 final. The board shall consider cases of executive clemency only upon  
20 application. All applications for executive clemency shall  
21 be made to the board, which Applications may be filed  
22 only by the person convicted of the crime, by his attorney  
23 acting on his behalf and with his consent, or by a  
24 court-appointed guardian or conservator acting on his  
25 behalf. The board shall cause an investigation to be made (a)  
of all the circumstances surrounding the crime for which the  
applicant was convicted, and (b) as to the individual

1 applicant if the board or a majority thereof approves such an  
2 application for executive clemency. It shall be the duty of the board to  
3 advise the governor and recommend action to be taken. *Two*  
4 *criteria*  
5 ~~that no clemency be granted, one governing~~  
6 ~~the board's decision and~~  
7 ~~the board's decision and~~  
8 ~~the board's decision and~~  
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25 ~~the board's decision and~~

10 Section 46-23-315, MCA, is amended to read:  
11 "46-23-315. Authority of governor to grant respites. *application*  
12 The governor has the power to grant respites after  
13 conviction and judgment for any offenses committed against  
14 the criminal laws of the state for such time as he thinks  
15 proper. A respite must be of temporary duration for a  
16 definite period of time. Any respite that is granted that  
17 stays the execution of a death warrant has the effect of  
18 postponing the execution of the warrant. In such a case, if  
19 clemency is not granted, the death warrant is again in  
20 effect at the expiration of the period of respite and the  
21 execution must take place on the date of expiration of the  
22 respite." *1 (see audit #11)*

23 NEW SECTION. Section 7. Extension of authority. Any  
24 existing authority to make rules on the subject of the  
25 provisions of [this act] is extended to the provisions of





NAME: Jerome T Landolf DATE: 1-29-89

ADDRESS: Helen, etc

PHONE: 442-6390

REPRESENTING WHOM? pt. med. Assn.

APPEARING ON WHICH PROPOSAL: S172

DO YOU: SUPPORT?  AMEND?  OPPOSE?

COMMENTS: \_\_\_\_\_  
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PLEASE LEAVE ANY PREPARED STATEMENTS WITH THE COMMITTEE SECRETARY.



