

ALASKA LEGISLATURE COMMITTEE FILES, 1989-1990 8672
6309 SENATE JUDICIARY

713

Due process must be satisfied in both the guilt phase and the penalty phase.¹¹¹ Consequently, as stated above,¹¹² competent counsel will investigate the defendant's entire background. A thorough investigation of a defendant's life will include locating, interviewing, and often presenting as witnesses, the defendant's family, friends, neighbors, teachers, co-workers, and social workers.¹¹³ Additionally, depending on the law of the jurisdiction, the defense may be permitted to call witnesses to testify about the cruelty of the death penalty,¹¹⁴ to testify that the death penalty does not deter,¹¹⁵ and to testify that the death penalty is discriminatorily imposed.¹¹⁶

The preparation of a penalty phase trial and the presentation of guilt phase witnesses require substantial time and significant resources.¹¹⁷ In California, the state appropriates funds each year to reimburse the county for money advanced for the defense preparation of capital trials.¹¹⁸ The funds are used to pay investigators, experts, and others needed to prepare and present the defense.¹¹⁹ Since 1978, the amount appropriated each year has been \$1 million.¹²⁰ However, due to yearly overexpenditures, the amount appropriated for fiscal year 1984-85 was \$4 million.¹²¹ Since approximately 325 capital cases are pending in California trial courts, this total figure suggests the average per case payout to be approximately \$12,000.¹²² However, in major capital cases this payout may be substantially more.¹²³

¹¹¹ See *Gardner v. Florida*, 430 U.S. 349, 358 (1976).

¹¹² See *supra* notes 135-41 and accompanying text.

¹¹³ See *supra* note 138 and accompanying text.

¹¹⁴ See, e.g., TRIAL OF THE PENALTY PHASE, *supra* note 133, at 17-18 (testimony of clergy on ethical and theological aspects of the death penalty); Bedau, *supra* note 34, at 19 (testimony of Hugo Bedau at pretrial hearing on cruelty of death penalty).

¹¹⁵ See, e.g., TRIAL OF THE PENALTY PHASE, *supra* note 133, at 20.

¹¹⁶ *Id.* at 25; see also Wolfgang & Riedel, *Racial Discrimination, Rape and the Death Penalty*, in THE DEATH PENALTY IN AMERICA, *supra* note 1, at 94.

¹¹⁷ Moreover, the state puts a great deal of time and resources into prosecuting capital cases and also calls many more witnesses than are generally called in a noncapital case. Telephone interview with Stuart Rappaport, Bureau Chief, Los Angeles Public Defender (Apr. 4, 1985).

¹¹⁸ See *supra* note 131.

¹¹⁹ *Id.*

¹²⁰ Telephone interview with Linda Lenker, Legal Administrator, Cal. Appellate Project (Feb. 28, 1985).

¹²¹ *Id.*

¹²² If the 325 cases divide the \$4,000,000 provided under CAL. PENAL CODE § 957.9 (West Supp. 1985), each case would receive \$12,307.69 from the state to prepare and present the defense.

¹²³ Comments on earlier draft from Michael Millman, Executive Director, Cal. Ap-

The \$4 million appropriation does not include defense attorney time or prosecution expenses — all expected to be paid by the county.²⁰⁰ The potential expenditure for a death penalty trial caused one California county to reject the death penalty as a possible punishment for the defendant.²⁰¹ The county's board of supervisors voted that the county could not afford to prosecute a death penalty case.²⁰² That county's concern about death penalty expenses has been echoed by others throughout the country. When New Jersey adopted a death penalty statute in 1982, it was estimated that prosecuting death penalty cases would cost the state \$16 million a year.²⁰³ According to the defense coordinator of the capital punishment cases, in August, 1983, New Jersey's public defender's office was budgeting \$102,000 for each of its fifty-two pending capital cases.²⁰⁴ The Maryland Public Defender asserts that ninety percent of its office's overexpenditures are due to death penalty cases.²⁰⁵ As evidence of the magnitude of a death penalty case and its concomitant costs, a Maryland law firm that accepted a death case on a *pro bono* basis worked for eleven months (1817 hours of services rendered) on the case. Had the state been charged, the bill would have been \$156,462.²⁰⁶ The Ohio Public Defender estimated that Ohio's 1981 death penalty statute would cost the defender's office approximately \$1.5 million annually.²⁰⁷ An Oregon attorney estimated that defense cost for a death penalty case in Oregon would be approximately

pellate Project (Mar. 28, 1985) (copy on file with *U.C. Davis Law Review*); interview with James Thomson, Attorney, Sacramento, Cal. (Apr. 5, 1985).

²⁰⁰ See *Corenevsky v. Superior Court*, 36 Cal. 3d 307, 314, 682 P.2d 360, 363, 204 Cal. Rptr. 165, 168 (1984) (appointment of second defense counsel not encompassed within Penal Code § 987.9 funds); *Keenan v. Superior Court*, 31 Cal. 3d 424, 430, 640 P.2d 108, 111, 180 Cal. Rptr. 489, 492 (1982).

²⁰¹ See *Corenevsky v. Superior Court*, 36 Cal. 3d 307, 314, 682 P.2d 360, 363, 204 Cal. Rptr. 165, 168 (1984) (because Imperial County Board of Supervisors refused to pay for a second defense counsel, superior court judge ordered that the prosecutor may not seek the death penalty).

²⁰² See *San Diego Tribune*, Dec. 3, 1982, at B-12, col. 3 (One member of the board of supervisors stated "[w]e're already borrowing \$6 million to pay our people's salaries. Should we lay off employees to pay for a criminal's defense?").

²⁰³ See Amicus Curiae Brief of Boston Bar Association at 67 n.21, *Commonwealth v. Colon-Cruz*, 393 Mass. 150, 470 N.E.2d 116 (1984) (copy on file with *U.C. Davis Law Review*).

²⁰⁴ *Id.*

²⁰⁵ See OPERATIONAL OVERVIEW, *supra* note 138, at 1.

²⁰⁶ See Amicus Curiae Brief of Boston Bar Association at 68 n.21, *Commonwealth v. Colon-Cruz*, 393 Mass. 150, 470 N.E.2d 116 (1984) (copy on file with *U.C. Davis Law Review*).

²⁰⁷ *Id.*

\$700,000.²⁰⁰

A constitutional death penalty process requires an enormous expense because procedures must scrupulously be followed, and the punishment demands an exactness when the sentencer decides upon whom it will be imposed. The procedures, safeguards, and goal of exactness follow the defendant through the appeals process.

C. Appeals Process

At the end of the trial process, a defendant condemned to death receives an automatic appeal to the state supreme court.²⁰¹ In *Gregg v. Georgia*,²¹⁰ the Court concluded that the statutorily required state supreme court review of every death sentence "serves as a check against the random or arbitrary imposition of the death penalty."²¹¹ The numerous errors in death penalty trials²¹² warrant the constitutional safeguard of state supreme court review, because the review helps ensure that the penalty imposed stays within the parameters of super due process and within the eighth amendment's mandate of prohibiting punishments that by their arbitrary and capricious imposition are cruel and unusual. The result of the review in a significant percentage of cases is a reduction of the sentence to life, a remand for resentencing, or a reversal.²¹³

²⁰¹ *Id.*

²⁰² See *Jurek v. Texas*, 428 U.S. 262, 276 (1976); *Proffitt v. Florida*, 428 U.S. 242, 256 (1976); *Gregg v. Georgia*, 428 U.S. 153, 204 (1976).

²⁰³ 428 U.S. 153 (1976).

²⁰⁴ *Id.* at 206; see, e.g., Note, *Constitutional Procedure*, *supra* note 52, at 733 (defendant's automatic appeal to state supreme court corrects error and prejudice in capital sentencing); see also Adelsstein, *Informational Paradox and the Pricing of Crime: Capital Sentencing Standards in Economic Perspective*, 70 J. CRIM. L. & CRIMINOLOGY 281, 296 (1979) (appellate court's role is clear in evolutionary process of capital sentencing).

²⁰⁵ See, e.g., Kaplan, *supra* note 130, at 573-74 (reversal in capital cases far greater than in noncapital cases generally due to number of issues in capital cases, greater complexity, courts' increased willingness to disturb verdict rather than affirm on ground justice was done, scrupulous attention to procedure, and court's ambivalence towards death penalty).

²⁰⁶ See Bedau, *American Attitudes Toward the Death Penalty*, in *THE DEATH PENALTY*, *supra* note 1, at 66 (over 2000 death sentences vacated since 1967 on constitutional grounds alone); Greenberg, *supra* note 78, at 918 (capital case reversal rate is approximately 60%; noncapital federal criminal judgment reversal rate of appealed cases is 6.5%; California reversal rate for all felony convictions is .8%); Sacramento Bee, Mar. 20, 1985, Pt. A, at 16 (in California, the state supreme court has reversed 27 of the 30 death penalty cases decided since the 1977 death penalty law); Sacramento Bee, June 6, 1985, Pt. A, at 1, col. 1 (California Supreme Court reversed death

A typical capital appeal takes approximately 800-1000 attorney hours.²¹⁴ In California, at the present compensation rate of \$60 per hour for court appointed defense attorneys, the direct appeal will cost approximately \$48,000-\$60,000. This amount does not include the attorney's expenses for travel, photocopying, or investigation for habeas corpus petitions.²¹⁵ Nor does the cost include the attorney general's expenses or the court's time. The direct appeal must also be viewed in terms of its impact on the state supreme court.²¹⁶ The defense and the prosecution prepare extensive briefs, and the trial proceeding transcripts are voluminous.²¹⁷

A final judgment by the state supreme court affirming a penalty of death far from ends the defendant's challenge of his conviction or sentence. As one recent study on the cost of capital litigation concluded, "a permanent and indispensable feature of capital litigation involves the review of constitutional, discretionary questions at a *minimum* of ten state and federal levels."²¹⁸ The trial process and state supreme court

sentences in four cases — three of the decisions were unanimous), *Death Row on Trial*, N.Y. Times, Nov. 13, 1983, § 6 (Magazine), at 80, 112 (In Florida, trial judges have overridden jury's recommendation for life and sentenced defendant to death in 62 murder trials. The Florida Supreme Court has ruled on 60 of these cases. In 45 cases, either the sentence was reduced to a life sentence, or the case was reversed and remanded to the trial court for further proceedings).

²¹⁴ Telephone interview with Michael Millman, Executive Director, Cal. Appellate Project (Apr. 1, 1985); see *Sacramento Bee*, Apr. 21, 1985, at A11, col. 3.

²¹⁵ Telephone Interview with Michael Millman, Executive Director, Cal. Appellate Project (Apr. 1, 1985).

²¹⁶ See, e.g., L.A. Times, Sept. 25, 1984, Pt. 1, at 16, col. 1 (According to Justice Lucas of the California Supreme Court, "[t]he death penalty is consuming an ever greater share of the high court's attention — to the point where it threatens to take all the justices' time."); *Death Row on Trial*, N.Y. Times, Nov. 13, 1983 § 6 (Magazine), at 80, 112 (the Florida Supreme Court spends at least one-third of its time on death cases).

²¹⁷ See, e.g., L.A. Times, Sept. 25, 1984, Pt. 1, at 16, col. 1 (Justice Lucas of the California Supreme Court noted that a recent death penalty brief, not even among the most massive, weighed 3 pounds, 13 ounces, and involved 32 volumes of trial transcripts); see also OPERATIONAL OVERVIEW, *supra* note 138, at 6 (fiscal year cost increase of trial transcripts due principally to death penalty cases); see also L.A. Daily J., Nov. 24, 1981, at 4, col. 3 (trial record is generally 4000 pages or more; opening brief averages 200 pages).

²¹⁸ CAPITAL LOSSES, *supra* note 117, at 7 (emphasis added). The levels of review may include, for example: A writ of certiorari to the Supreme Court; post-conviction proceedings such as evidentiary hearings to vacate the judgment or set aside the sentence; review by the state supreme court of adverse rulings in the post-conviction proceedings; petition for writ of habeas corpus to the United States District Court; appeal of an adverse determination of the writ to the federal court of appeals; petition for a

review merely constitute the first two steps in the process. If the state supreme court affirms the death sentence, the defendant has several post-conviction remedies available to further challenge his death sentence. Most capital defendants pursue all avenues available.²¹⁹ A death row inmate has every incentive to pursue post-conviction relief.²²⁰ First, the appeals and writ process results in a number of reversals or remands for sentencing.²²¹ According to an American Bar Association report, federal circuit courts have ruled for the defendant in at least twenty-eight of thirty-six capital cases since 1976.²²² Second, the pending post-conviction proceedings extend the inmate's life. In the interim, new evidence may prove the inmate's innocence, or legal developments may render his death sentence unconstitutional.²²³

Generally, the defendant first seeks United States Supreme Court review by writ of certiorari.²²⁴ Preparation of the petition takes many hours.²²⁵ One recent study concluded that when the Supreme Court grants a hearing, the entire process, that is, the research, certiorari petition, briefs, and oral argument preparation can take approximately forty-six percent of an attorney's work year.²²⁶ Another critical post-conviction remedy available to the capital defendant is the writ of habeas corpus. Habeas corpus relief is available at both the state and federal level.²²⁷ Federal habeas corpus relief requires that the defendant

rehearing en banc from a negative ruling in the court of appeals; petition for writ of certiorari to the Supreme Court to review a negative ruling in the court of appeals.

²¹⁹ See, e.g., Kaplan, *supra* note 130, at 573.

²²⁰ *Id.* (the time the review takes lengthens the time the death row defendant can live; the reversal rate is far greater than for noncapital (even murder) cases). The need for pursuing post conviction relief in these difficult, emotionally charged cases was well illustrated in the case of James C. McCray. McCray was on Florida's death row for eight years. The Florida Supreme Court took almost five years to review and affirm his sentence. His state-appointed clemency attorney was incompetent. Two weeks before his scheduled execution, a private defense attorney took the case, copied the ten volume record from the Attorney General's office (the defense record disappeared with the clemency attorney) and discovered that the trial judge made an error when instructing the jury. Six days before the appointed execution time, the Florida Supreme Court ordered that McCray be given a new trial. L.A. Daily J., Aug. 27, 1982, at 5, col. 3.

²²¹ See *supra* note 213 and accompanying text.

²²² See Sacramento Bee, Apr. 21, 1985, at A11, col. 3.

²²³ See *supra* notes 66-73 and accompanying text.

²²⁴ See Kaplan, *supra* note 130, at 573; CAPITAL LOSSES, *supra* note 117, at 21.

²²⁵ A petition for writ of certiorari to the Supreme Court may take as many as 50 hours to prepare. Comments on earlier draft from Michael Millman, Executive Director, Cal. Appellate Project (Feb. 11, 1985) (copy on file with U.C. Davis Law Review).

²²⁶ See CAPITAL LOSSES, *supra* note 117, at 22.

²²⁷ See *id.* at 6 n.26 (theoretical model of capital case proceedings); see also

demonstrate that his imprisonment violates the United States Constitution."²⁹⁸ When filing for a writ of habeas corpus, the defendant may introduce evidence to support his version of the facts because state court factual findings are only presumptively valid.²⁹⁹ Additionally, federal courts may reconsider prior rulings of law by state courts.³⁰⁰ If the defendant's petition for a writ is denied, he may appeal³⁰¹ or file a new petition for a writ of habeas corpus. However, a defendant's failure to raise a claim in the previous habeas corpus proceeding may bar him from litigating the claim in a subsequent proceeding, if the court determines that there has been an "abuse of the writ."³⁰² As the Court permits the state to take a life only after scrupulously following constitutional procedure, the financial cost of permitting numerous habeas claims pales when compared to the alternative social and moral cost of an erroneous and irrevocable execution.

Appellate and post-conviction costs include numerous *pro bono* hours expended by private law firms. Most of these firms enter the litigation close to the appointed time of execution, after all state proceedings have been exhausted. One firm that sought post-conviction relief in four capital cases estimated the costs of each case to the firm as: (1) \$88,785 in out-of-pocket disbursements and \$312,579 in attorney hours in a case that is still pending; (2) \$48,909 in out-of-pocket disbursements and \$138,858 in attorney hours; (3) \$20,752 in out-of-pocket disbursements and \$116,787 in attorney hours; and (4) \$20,038 in out-of-pocket disbursements and \$138,101 in attorney hours.³⁰³

The dollars and cents statistics of a constitutionally imposed death

Goldberg, *The Supreme Court Reaches Out and Touches Someone—Fatally*, 10 HASTINGS CONST. L.Q. 7, 13 (1982) (federal habeas corpus as a safeguard of defendant's constitutional rights is still preserved). For example, in California, violation of certain fundamental procedural rights may be grounds for issuance of a writ of habeas corpus regardless of the state of the evidence or whether the claims were made on direct appeal. See J. SMITH & M. SNEDEKER, *THE CALIFORNIA STATE PRISONERS HANDBOOK* 328-29 (1982).

²⁹⁸ 28 U.S.C. § 2254(a) (1982).

²⁹⁹ *Id.* § 2254(d).

³⁰⁰ *Neil v. Biggers*, 409 U.S. 188, 190-91 (1972).

³⁰¹ 28 U.S.C. § 2253 (1982).

³⁰² *Id.* § 2255, Rule 9(b). It has been suggested that an exception to the bar be made for capital defendants, as procedural errors should not preclude a death sentenced defendant from pursuing constitutional claims. See Batey, *Federal Habeas Corpus Relief and the Death Penalty: "Finality With a Capital F"*, 36 U. FLA. L. REV. 252, 271-72 (1984).

³⁰³ Telephone interview with Jay Topkis, Attorney, Paul, Weiss, Rifkind, Wharton & Garrison, New York City (Mar. 8, 1985).

sentence are overwhelming. However, to minimize the risk of arbitrary and capricious imposition of death, a costly execution process is unavoidable.

III. IMPLICATIONS OF THE DEATH PENALTY ON THE CRIMINAL JUSTICE SYSTEM

Financial considerations must play a role in criminal justice administration. The criminal justice system, like any system, has a finite source of funds. These funds will be used to achieve the system's goals and will inevitably define the types of goals that can be achieved.²²⁴ One goal of the criminal justice system is crime prevention. Another is punishment.²²⁵ A third goal is to prevent false convictions and disproportionate punishments.

Part II presented an overview of the costs of a constitutional state-imposed execution system. The costs are astronomical, although necessary. An expedited capital punishment process invites the risk of error and caprice.²²⁶ Any attempt to modify the capital process must confront the constitutional recognition that death is different.²²⁷ As one author so aptly stated, "[w]e must be careful not to imitate the village that took down the Danger—Curve Ahead sign on its road because nobody in

²²⁴ See, e.g., Harrell, *The Underfunded Commitment to Justice*, 69 A.B.A. J. 528 (1983).

²²⁵ Punishment is one of society's means of controlling crime and protecting itself. See McGee, *Capital Punishment as Seen by a Correctional Administrator*, 28 FED. PROBATION, June 1964, at 11, 15 (society uses the criminal law to protect itself, and criminal law uses punishment to inhibit conduct detrimental to society), Tropman & Gohlke, *Cost/Benefit Analysis — Toward Comprehensive Planning in the Criminal Justice System*, 19 CRIME & DELINQ. 315 (1973).

²²⁶ See *Coleman v. Balkcom*, 451 U.S. 949, 953 (1981) (Court must beware of novel procedural shortcuts resulting in constitutional error) (Stevens, J., concurring in memorandum decision).

²²⁷ See *Gardner v. Florida*, 430 U.S. 349, 357-58 (1976) (Five members of the Court expressly recognized that death is a punishment different from any other that may be imposed. "It is of vital importance to the defendant and to the community that any decision to impose the death sentence be, and appear to be, based on reason rather than caprice or emotion.") (opinion of Stevens, J.); see also Note, *The Right of Confrontation and Reliability in Capital Sentencing — Proffitt v. Wainwright*, 685 F.2d 1227 (11th Cir. 1982), 20 AM. CRIM. L. REV. 599, 604 (1983) (some judges conclude that the Court's modification of constitutional requirements to impose death renders death penalty a procedural impossibility); Note, *The Impact of a Sliding Scale Approach to Due Process on Capital Punishment Litigation*, 30 SYRACUSE L. REV. 675, 681 (1979) (Court has indicated due process test for capital sentencing procedures is a function of "evolving standards of procedural fairness in a civilized society," a requirement not applied in noncapital cases) (quoting *Gardner v. Florida*, 430 U.S. at 357).

years had gone off the curve."¹⁹⁹

A system for achieving society's goals of preventing crime while providing a consistent and evenhanded punishment system requires wise use of the resources available to the administration of justice. However, maintaining a system with capital punishment deviates from and distorts these goals. Capital case litigation constitutionally requires that super due process be scrupulously followed.²⁰⁰ Concomitantly, a capital trial demands a disproportionate amount of time by judges, prosecuting attorneys, defense attorneys, juries, and courtroom and correctional personnel. The demands made upon the legal system translate into an unparalleled financial and emotional²⁰¹ toll. Consequently, rather than providing a means of effectively adjudicating the law and combating crime, the death penalty's impact upon the administration of justice runs counter to its alleged goals.²⁰² The costly, time consuming, contro-

¹⁹⁹ Kaplan, *supra* note 130, at 576.

²⁰⁰ See *supra* notes 27-30 and accompanying text.

²⁰¹ In *United States v. Harper*, 729 F.2d 1216, 1223 (9th Cir. 1984), the court stated "[E]nduring a trial that entails the possibility of a death penalty imposes a hardship "different in kind" from enduring the discomfiture of any other trial. The emotional stress and strain of a trial in a capital case are extreme in character and *sui generis*. We consider the ordeal of undergoing such a trial truly a substantial hardship."

²⁰² Capital punishment's proposed "benefit" of deterrence has been extensively researched and criticized. See, e.g., Bailey, *Imprisonment v. the Death Penalty as Deterrent to Murder*, 1 LAW & HUM. BEHAV. 239 (1977); Bedau, *Deterrence: Problems, Doctrines, and Evidence*, in DEATH PENALTY, *supra* note 1, at 93-103; Bowers & Pierce, *Deterrence or Brutalization: What Is the Effect of Executions?*, 26 CRIM. & DELINQ. 453 (1980); Zeisel, *The Deterrent Effect of the Death Penalty: Facts v. Faith*, in THE DEATH PENALTY IN AMERICA, *supra* note 1, at 116. But see Ehrlich, *The Deterrent Effect of Capital Punishment: A Question of Life or Death*, 65 AM. ECON. REV. 397 (1975). Ehrlich's study has been criticized, and studies utilizing his methodology have failed to duplicate his results. See, e.g., Baldus & Cole, *A Comparison of the Work of Thorsten Sellin and Isaac Ehrlich on the Deterrent Effect of Capital Punishment*, 85 YALE L.J. 170 (1975); Bowers & Pierce, *supra* at 463; Bowers & Pierce, *The Illusion of Deterrence in Isaac Ehrlich's Research on Capital Punishment*, 85 YALE L.J. 167 (1975). The other significant proffered "benefit" is retribution. "In part, capital punishment is an expression of society's moral outrage at particularly offensive conduct The instinct for retribution is part of the nature of man, and channeling that instinct in the administration of criminal justice serves an important purpose in promoting the stability of a society governed by law" *Gregg v. Georgia*, 428 U.S. 153, 183 (1976) (Stewart, J., quoting from his concurring opinion in *Furman*, 408 U.S. 236, 308 (1972)); see, e.g., Gibbs, *The Death Penalty, Retribution and Penal Policy*, 69 J. CRIM. L. & CRIMINOLOGY 291 (1978); Pugsley, *A Retributivist Argument Against Capital Punishment*, 9 HOUSTON L. REV. 1501 (1981); Watt & Stafford, *Public Goals of Punishment and Support for the Death Penalty*, 21 J. RE-

versial, and devastating process of capital punishment drains the criminal justice system of energy and resources that the system could otherwise direct toward achieving its goals.

What are the alternatives for the criminal justice system? An alternative punishment exists — life imprisonment. In 1982, the Director of the Michigan Department of Corrections stated that the argument that capital punishment is needed for society's safety will not withstand scrutiny; life imprisonment is as adequate for that purpose.²⁹² Currently, the cost of housing an inmate in prison is approximately \$14,254 per year.²⁹³ A Florida study found that the average age of persons sentenced to death was 30.8 years.²⁹⁴ If an inmate lives to age sixty, multiplying the cost per year of life imprisonment by thirty years may give a rough estimate of the cost of this alternative punishment. Similarly, capital punishment costs, from the charging decision through the appeals, may be estimated. Conclusions are difficult given the variables and uncertainty of factors. For example: the cost increase due to decreased plea bargaining; whether the attorney chooses to conduct sequestered voir dire; or whether the attorney effectively investigates the capital defendant's background, are critical factors that affect the total amount, yet cannot be accurately estimated. Even with the uncertainties, assuming that the defense attorney will effectively prepare the case, pursue pretrial motions, thoroughly investigate and prepare for

SEARCH CRIME & DELINQ. 95 (1984); Comment, *Retribution Exclusive of Deterrence: An Insufficient Justification for Capital Punishment*, 57 S. CAL. L. REV. 199 (1983). In fact, many death penalty proponents consider retribution alone a sufficient justification for the death penalty. See Vidmar & Ellsworth, *supra* note 34, at 1256-57 (54% of those who favored capital punishment stated they would favor it even if it did not deter); Warr & Stafford, *supra*, at 98-104 (persons who view retribution as the most important reason for punishment overwhelmingly favor capital punishment). However, retributionists may want to consider the means, given the greater resources that would be available if life imprisonment were the ultimate penalty. See, e.g., Pugsley, *supra*, at 1514 (retribution theory seeks to achieve justice and reaffirm community rights and rule system); Comment, *Retribution Exclusive of Deterrence: An Insufficient Justification for Capital Punishment*, 57 S. CAL. L. REV. 199, 206-07 (1983) (retribution theory requires that the undeserving not be punished, and that punishment must be imposed upon those who deserve it to return society to a people equal in satisfactions). See also Tropman & Gohlke, *supra* note 235, at 321 n.10 (although cost-benefit analysis does not include the "political costs and benefits," its importance and significance come from providing alternatives for the worst projects in a system).

²⁹² See L.A. Daily J., Oct. 12, 1982, at 4, col. 3.

²⁹³ Cost of housing inmate at San Quentin for one year is \$14,254. Telephone interview with Department of Corrections staff services analyst, Sacramento, Cal. (Feb. 19, 1985).

²⁹⁴ See CAPITAL LOSSES, *supra* note 117, at 23 n.61.

the penalty phase, and that the appeal and post-conviction remedies are sought, a minimal estimate for each execution is \$600,000.²⁴⁴ The cost of death row security additionally increases the cost.²⁴⁵

Life imprisonment saves the criminal justice system's resources. The number of pretrial motions filed in a noncapital case is one-half or less than the number filed in death penalty cases.²⁴⁶ There is no bifurcated proceeding. The investigation process is more limited, as it is generally confined to issues of the defendant's guilt. In noncapital cases, mitigating circumstances and extensive investigation of the defendant's background do not play the role they do when determining whether a defendant lives or dies. The time and expense that the death penalty process takes from defense attorneys, district attorneys, and judges could be channeled elsewhere. Assuming the ratio of reversals and remands in noncapital to those in capital cases remains constant, the post-trial proceedings will substantially decrease.²⁴⁷

A less costly constitutional process for imposition of the death penalty does not exist. The minimum constitutional safeguards developed for death penalty sentencing were established by the Court to prevent the arbitrary and capricious application of death. Economizing capital punishment is unconstitutional. In a criminal justice system with inherent discretion, the constitutional mandate that death be imposed regularly and evenhandedly appears to be unachievable.²⁴⁸

²⁴⁴ This estimate reflects the minimum cost because of the significant incalculable increase due to limited plea bargaining. The \$600,000 estimate was calculated as follows: (1) \$12,000 for experts and investigation. See *supra* notes 193-98 and accompanying text. (2) \$17,330 for pretrial motions: \$10,930 for courtroom time (using an estimate of one week), see *supra* note 160 and accompanying text; and \$6400 for attorney time — figured at \$40 per hour for the district attorney and for the public defender, estimating a two-week preparation. (3) \$87,400 increase for voir dire, see *supra* note 174 and accompanying text; and \$6400 for attorney time estimating a two-week voir dire. (4) \$65,580 increase for courtroom trial time, see *supra* note 177 and accompanying text; \$12,800 for attorney time estimating a one-month trial. (5) \$100,000 for estimated appeal costs, see *supra* notes 214-17 and accompanying text. (6) \$221,202 for post-conviction remedies; see *supra* text accompanying note 233, figure estimated is the average of the cases listed. (7) \$64,143 for estimated four and one-half year stay on death row, see *supra* text accompanying note 243; see, e.g., Sireib, *Executions Under the Post-Furman Capital Punishment Statutes: The Halting Progression from "Let's Do It" to "Hey, There Ain't No Point in Pulling so Tight"*, 15 *RUTGERS L. REV.* 443, 447-75 (1984) (average stay on death row is approximately 4.5 years).

²⁴⁵ See *CAPITAL LOSSES*, *supra* note 117, at 23 (estimating that the expense of death row security can increase the cost by as much as \$15,000 annually).

²⁴⁶ See *supra* note 117 and accompanying text.

²⁴⁷ See *supra* notes 212-13 and accompanying text.

²⁴⁸ See, e.g., Greenberg, *supra* note 78, at 914 (Furman stands for the proposition

A moral and just society should not want to expedite a process that would lead to the execution of the innocent or the use of the death penalty in cases not warranting such a harsh penalty. The Constitution does not permit a process that is vulnerable to caprice or mistake when the result is death. Maintaining a constitutional death penalty process results in astronomical costs — both morally and financially — for the criminal justice system.

CONCLUSION

A criminal justice system that includes the death penalty costs more than a system that chooses life imprisonment as its ultimate penalty. Because the penalty is death, the Constitution requires additional procedural safeguards to protect the defendant and to ensure a fair system. These safeguards, formulated and designed specifically for capital trials, are costly. The argument that the death penalty costs less to punish than does life imprisonment is erroneous. Alternatives exist to punish the convicted defendant and protect society. When our "standards of decency" evolve to the point that the death penalty is considered per se cruel and unusual, or when we recognize the inability of the system to fairly or evenhandedly impose death,²¹⁰ the penalty of death will be replaced with life imprisonment. Justice will be served, society will be protected, the criminal justice system will be given a reprieve, and the state will not kill those few who are arbitrarily and capriciously chosen.

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that capital punishment can be upheld only if it is applied regularly and evenhandedly); Krivosha, Copple & McDonough, *A Historical and Philosophical Look at the Death Penalty — Does It Serve Society's Needs?*, 16 CREIGHTON L. REV. 1, 37 (1982) (experience discloses that under present standards, goal of imposing death penalty in nondiscriminatory manner nearly impossible to meet).

²¹⁰ For a full discussion about the inherent nature of caprice and mistake in the imposition of the death penalty, see C. BLACK, *supra* note 2.

APPENDIX

District Attorney Questionnaire

1. Approximately how many more pre-trial motions are filed by the defense, and therefore need a response, in a capital case, as compared to a noncapital murder case?

2. Please list some of the motions that you respond to, which although not unique to capital cases, are more predominantly filed in capital cases.

3. Are the standard motions that you respond to in capital cases more complex and more time consuming?

4. If possible, please estimate the additional number of hours spent in preparing your response to the standard motions for capital trials.

5. Please approximate any differences in numbers of hours for investigations between a capital and a noncapital murder case.

6. Are psychiatric examinations more commonly used in at least some aspect of the capital trial, as compared with a noncapital murder case?

a. If psychiatric testimony is introduced by the defense, how often does the prosecution and/or the court introduce its own psychiatric evaluation?

7. If you use experts, is the quality of the experts the same or better than experts used in noncapital murder cases?

8. Do you attempt to obtain the "best" expert witnesses?

9. Please list the types of expert witnesses which you may use that are unique to capital cases.

10. In your state, is individual *voir dire* generally conducted in a capital case?

11. Is prospective juror questioning generally longer in capital cases?

a. If so, please estimate by number of days the approximate increase in time for empaneling the jury, as compared with a noncapital murder case.

12. Assuming the same case were tried both as a capital and as a noncapital case, approximately how many more days would the trial take if it is tried as a capital case.

13. a. Please estimate the average number of hours spent on a capital appeal.

b. Please estimate the average number of hours spent on a noncapital appeal.

14. Approximately how many days does it take one attorney to prepare a response to a death row defendant's writ of certiorari to the

United States Supreme Court?

15. General comments and impressions. (Please feel free to use back of questionnaire.)

Public Defender Questionnaire

1. Approximately how many more pre-trial motions are filed in a capital case, as compared to a noncapital murder case?
2. Please list some of the defense motions, which although not unique to capital cases, are more predominantly filed in capital cases.
3. Are the standard motions filed in capital cases more complex, and more time consuming?
4. If possible, please estimate the additional number of hours spent in preparing the standard motions for capital trials.
5. Please approximate any differences in number of hours for investigations between a capital and a noncapital murder case.
6. Are psychiatric examinations more commonly used in at least some aspect of the capital trial, as compared with a noncapital murder case?
7. If you use experts, is the quality of the experts the same or better than experts used in noncapital murder cases?
8. Do you attempt to obtain the "best" expert witnesses?
9. Please list the types of expert witnesses which you may use that are unique to capital cases
10. In your state, is individual voir dire generally conducted in a capital case?
11. Is prospective juror questioning generally longer in capital cases?
 - a. If so, please estimate by number of days the approximate increase in time for empaneling the jury, as compared with a noncapital murder case.
12. Assuming the same case were tried both as a capital and as a noncapital case, approximately how many more days would the trial take if it is tried as a capital case.
13.
 - a. Please estimate the average number of hours spent on a capital appeal.
 - b. Please estimate the average number of hours spent on a noncapital appeal.
14. In what percentage of capital cases that you handle, are you likely to seek a habeas corpus hearing, in addition to appeal, as compared with noncapital cases.
15. Approximately how many days does it take one attorney to prepare a writ of certiorari to the United States Supreme Court for a capi-

tal case?

16. General comments and impressions. (Please feel free to use back of questionnaire.)

S B

18

STATE OF ALASKA
THE LEGISLATURE

POUCH Y STATE CAPITOL
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907 465 1800

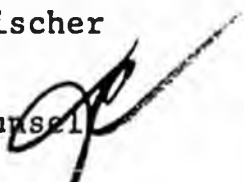
LEGISLATIVE AFFAIRS AGENCY

M E M O R A N D U M

November 23, 1988

SUBJECT: Recriminalization of marijuana
(Work Order No. 6-0257A)

TO: Senator Paul Fischer

FROM: Jack Chenoweth
Legislative Counsel 

I want to reiterate advice this office provided two years ago on this bill.

In October, 1986, commenting to the draft of what would become SB 32, Legislative Counsel Keith Levy wrote:

This provision conflicts with the right to privacy under Art. 1, sec. 22 of the Alaska Constitution. In the case of Ravin v. State, 537 P.2d 494 [(Alaska, 1975)], the Alaska Supreme Court ruled that this right to privacy within the home prevailed over an inadequately compelling governmental interest in preventing marijuana possession and use by adults in the home. The policy arguments made in the bill are not, in my opinion, sufficiently weighty to overcome the constitutional protection recognized in the Ravin decision.

With reference to the draft that would become the HESS Committee Substitute (CSSB 32 (HESS)), from which this bill draft is taken, in April, 1987, Mr. Levy offered this note of caution:

As discussed in the memorandum dated October 29, 1986, it is this narrow area of marijuana possession that presents constitutional problems under the ruling of the Alaska Supreme Court in Ravin v. State,

When the legislation was scheduled for Senate debate in February, 1988, I was asked by one of your colleagues for an opinion regarding the bill. I responded in part:

The "findings"--bill section 1 identifies them as such--purports to set out factual conclusions from which the legislature has decided to proceed to "recriminalize" marijuana. As I've reviewed the recitations, I've found that many of the statements are general and speculative, or have relatively little to do with concerns of public health, safety, and welfare that affect significant numbers of Alaskans.

More to the point, however, is my belief that the Senate committee did not establish a record in hearings that would verify the recitations set out in the findings sufficient to meet the Ravin burden. A comparative examination of the findings to the court's analysis in Ravin leads me to conclude that much of the material set out as findings is little more than conclusions that have already received some attention by the court in the initial decision. Virtually all of the findings in section 1(a) of the bill have a counterpart in the extended discussion of the physiological and psychological effects of the drug undertaken by the court in its decision. Almost everything that [CSSB 32 (HESS)] reports as "fact" or offers as conclusion is addressed in the earlier opinion. (So, for example, where the committee substitute asserts that the "THC content of commonly obtainable marijuana has increased . . ." [finding(a)(6)], the Ravin decision seemingly anticipates the finding by reporting-- and subsequently dismissing--the claim that "most of the [physiological] damage suggested by [the] studies [reviewed and relied on by the court] comes in the intensive use of concentrated forms of THC." Ravin, supra., at 506, Emphasis added. And, where [CSSB 32 (HESS)] recites that "other psychological reactions to marijuana include loss of memory, anxiety, panic, paranoia, psychosis, psychological dependence, and impairment in thinking, reading comprehension, verbal and arithmetic problem solving, and perception of distance and time" [finding(a)(12)], the litany appears to have been taken almost intact from similar observations made in the Ravin decision at pp. 506-507.

Recitations of findings unsupported by significant evidence--or at least significant new evidence-- makes it less likely that the court would sustain the enactment against a constitutional challenge.

Even at that, the emphasis in section 1(a) of the committee substitute is overwhelmingly on the purported effect of marijuana on the individual. By itself, that is probably not enough, as Keith Levy has claimed, to meet the test of Ravin, i.e., that the record show that the legislature's deliberations found "a close and substantial relationship of the intrusion to a legitimate governmental interest." The [Ravin] opinion makes it quite clear that government may not "simply decide what is in a person's best interest and then compel it." The burden, the court has made clear, is on the government to demonstrate that "the public health or welfare will in fact suffer if the controls are not applied."

. . .

I cannot conclude that [CSSB 32 (HESS), the source of this bill draft,] meets the Ravin tests. . . . [I]t should be clear that bill findings that are unsupported by rigorous examination by the legislative committee that authored them would surely be insufficient to meet the burden of the Ravin test. . . . [I]t is far from clear to me that the evidence offered [in CSSB 32 (HESS)] compels the conclusion the state may now act to prohibit possession of marijuana for a reason related to the public health or welfare.

Legislative counsel in this office do not normally advise on alternatives and strategies. In this case, I want to make an exception. Were this my legislation to offer and support, I would give attention to two additional elements. Let me suggest them to you.

First, consider reintroduction and support of a measure comparable to last session's SJR 4. The legislature may always amend the constitution, as SJR 4 proposed, to specifically authorize the legislature to define as criminal acts the possession of controlled substances, including marijuana. A constitutional amendment would, of course, require voter approval, but it might be to the benefit of those who are suggesting recriminalization * have the benefit of the expression of voter sentiment on this issue that public consideration of the constitutional amendment would allow. While a constitutional amendment could not be put on the ballot before November, 1990, in the long run that two year delay may be shorter than having to run the risk of pro-

Senator Paul Fischer
Page 4
November 23, 1988

tracted re-litigation of the right to privacy arguments that would arise in the absence of adoption of the amendment. Tie the effective date of this bill to approval of the constitutional amendment in November, 1990, and you would appear to have a legally sound legislative approach to accomplish what you intend.

Second, as you and your colleagues consider this bill, it would be advantageous, in my view, for one or more of the committees to hear directly from secondary school students--either through their statewide and school-based organizations or individually--on the impact of availability of marijuana to their own use of it. The committee should incorporate a summary of that testimony into the bill's findings. The Ravin decision recognizes that the state may legitimately limit possession of marijuana by minors, and AS 11.71 presently does so. As state law currently does not prohibit possession of less than four ounces for personal consumption within one's residence, it may well be that the availability of the substance in this quantity contributes to having it more available to minors living in the home. This is alluded to in findings set out in section 1(b)(4) and (5), but you may want to more fully develop it. The legislature's consideration of this revision of the law could focus on the public health impact that possession by adults of small amounts of marijuana has had on minors. In my judgment, that kind of testimony may most profitably be obtained from students or young persons who may have had firsthand experience.

If the bill draft or this memorandum present questions, please contact me.

Enclosure

JC:gc
WKG4/073

STATE OF ALASKA
THE LEGISLATURE

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LEGISLATIVE AFFAIRS AGENCY

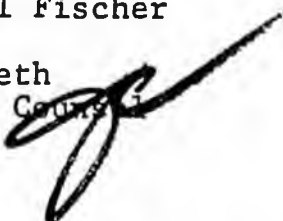
MEMORANDUM

December 12, 1988

SUBJECT: Relating to marijuana
(Work Order 6-0257A)

TO: Senator Paul Fischer

FROM: Jack Chenoweth
Legislative Council



This is legislation intended to make criminal the possession of small amounts of marijuana. From last session's debates you will recall, I am sure, that the criminal code defines marijuana as a schedule VIA controlled substance, the only substance within that classification. Let me note, too, that under current law "simple" possession--that is, possession without intent to manufacture or deliver--of amounts of more than one-half pound constitutes misconduct involving a controlled substance in the fifth degree, defined as a class A misdemeanor. [Upon conviction of a class A misdemeanor, one may be imprisoned for up to one year and be fined not more than \$5,000.] Under current law, "simple" possession of an amount between four ounces and eight ounces (i.e. one-half pound) is defined as misconduct involving a controlled substance in the sixth degree, a class B misdemeanor. [Upon conviction of a class B misdemeanor, one may be imprisoned for up to 90 days and be fined not more than \$1,000.] Under current law, no provision defines as criminal possession of less than four ounces if that possession occurs other than in a public place.

The operative provisions of this bill are based on last legislature's SB 32. When drafted and offered in late 1986 for introduction in the 1987 session, the bill draft was accompanied by a memorandum that said:

The accompanying bill draft was prepared in response to your request for a draft patterned after [the 14th Legislature's] SB 163. This draft makes the possession of any amount of marijuana illegal. The proposed

amendment to AS 11.71.060(a) specifically concerns possession of any amount less than one-half pound and makes it a misdemeanor.

This provision conflicts with the right to privacy under art. 1, sec. 22 of the Alaska Constitution. In the case of Ravin v. State, 537 P.2d 494 (Alaska, 1975), the Alaska Supreme Court ruled that this right to privacy within the home prevailed over an inadequately compelling governmental interest in preventing marijuana possession and use by adults in the home. The policy arguments made in the bill are not, in my opinion, sufficiently weighty to overcome the constitutional protection recognized in the Ravin decision.

All that is different between the 1987 bill draft and the one that accompanies this memorandum is the "Findings" provision, bill section 1. But the changes made are significant. The changes are based upon an editing of the findings set out in the earlier version, together with addition of material based, in part, on testimony obtained by the House Health, Education, and Social Services Committee.

The question set out in the memo quoted above, applicable to the 1987 version of this legislation, remains: Does the right to privacy in the home prevail over the governmental interest stated in the "Findings" section as revised in April and May of 1988, the basis of this bill draft?

Though I do not have the benefit of experience that comes from attending the House HESS committee's proceedings on SB 32 last spring, I am familiar generally with the content of the testimony presented during hearings before the committee. I understand that the testimony presented a more balanced examination of the medical effects and physical consequences of marijuana use than is set out in the "Findings" of this bill draft. Indeed, the "Findings" here recited are a combination of material derived from the earlier Senate-passed bill, coupled with some medical evidence offered to the House HESS committee. But I also believe that there was sound evidence presented to the committee to the contrary, and do not see it identified in this legislation.

Last session, speaking to the Senate-passed version, CSSB 32 (HESS), I wrote

: Paul Fischer

er 12, 1988

In Ravin, the court acknowledged that the right of privacy is limited by the "legitimate needs of the State to protect the health and safety of its citizens." 537 P.2d 494 at 501. Responding to the evidence marshalled by the state in defense of its prosecution, the court determined that

. . . It appears that effects of marijuana on the individual are not serious enough to justify widespread concern, at least as compared with the far more dangerous effects of alcohol, barbiturates, and amphetamines. Moreover, the current patterns of use in the United States are not such as would warrant concern that in the future consumption patterns are likely to change.

Ravin, supra., at 509 - 510. The court did not close the door to debate or to the adoption of legislation that would survive constitutional scrutiny:

Research is continuing extensively. Scientific doubts persist, however, and that fact has significance for our application of the law. It is a long-standing rule of law that statutes designed to protect the public health will receive a liberal construction. . . . There is a presumption in favor of public health measures; when there is substantial doubt as to the safety of a given substance or situation for the public health, controls intended to obviate the danger will usually be upheld.

Ravin, supra., at 510. But, the court concluded:

. . . no adequate justification for the state's intrusion into the citizen's right to privacy by its prohibition of possession of marijuana by an adult for personal consumption in the home has been shown. The privacy of the individual's home cannot be breached absent a persuasive showing of a close and substantial relationship of the intrusion to a legitimate governmental interest. Here mere scientific doubts will not suffice. The state must demonstrate a need based on proof that the public health or welfare will in fact suffer if the controls are not applied. [Emphasis added]

Ravin, supra. at 511.

In an inquiry as to constitutionality of legislation setting controls on possession of marijuana in the home, the burden is on the state to "demonstrate a need based on proof that the public health or welfare will in fact suffer if controls are not applied."

Under scrutiny, would CSSB 32 (HESS) meet the burden laid down in the Ravin decision?

Assuming CSSB 32 (HESS) is passed and becomes law, in a prosecution under it, applying the Ravin test, a court is not constrained to look only at the legislative findings to ascertain whether there is "demonstrated . . . need based on proof" that public health or welfare will be affected by the criminal re-regulation of the possession of the plant. The court may also conduct an analysis beyond the findings cited by the legislature in its consideration of the bill, Gray v. State, 525 P.2d 524 (Alaska, 1974), and rely on other relevant evidence and arguments "including matters which have never been presented to or considered by the legislature in its deliberations." Gray, supra., note 15 at 528.

What is in balance is, as the court has said

. . . the general proposition that the authority of the state to exert control over the individual extends only to activities of the individual which affect others or the public at large as it relates to matters of public health or safety, or to provide for the general welfare. . . . The state cannot impose its own notions of morality, propriety, or fashion on individuals when the public has no legitimate interest in the affairs of those individuals. . . .

Ravin, supra., at 509.

The "findings"--bill section 1 identifies them as such--purport to set out factual conclusions from which the legislature has decided to proceed to "recriminalize" marijuana. As I've reviewed the recitations, I've found that many of the statements are general and speculat[ive], or have relatively little to do with

concerns of public health, safety, and welfare that affect significant numbers of Alaskans.

More to the point, however, is my concern that the Senate committee did not establish a record in hearings that would verify the recitations set out in the findings sufficient to meet the Ravin burden. A comparative examination of the findings to the court's analysis in Ravin leads me to conclude that much of the material set out as findings is little more than conclusions that have already received some attention by the court in the initial decision. Virtually all of the findings in section 1(a) of the bill have a counterpart in the extended discussion of the physiological and psychological effects of the drug undertaken by the court in its decision. Almost everything that the Senate committee substitute reports as "fact" or offers as conclusion is addressed in the earlier opinion. (So, for example, where the committee substitute asserts that the "THC content of commonly obtainable marijuana has increased from less than one percent 10 years ago to as high as 10 percent today" (finding 6), the Ravin decision seemingly anticipates the finding by reporting--and subsequently dismissing--the claim that "most of the [physiological] damage suggested by [the] studies [reviewed and relied on by the court] comes in the context of intensive use of concentrated forms of THC." Ravin, supra., at 506 [Emphasis added]. And, where the committee substitute recites that "other psychological reactions to marijuana include loss of memory, anxiety, panic, paranoia, psychosis, psychological dependence, and impairment in thinking, reading comprehension, verbal and arithmetic problem solving, and perception of distance and time" (finding 12), the litany appears to have been taken almost intact from similar observations made in the Ravin decision at pp. 506-507.)

Recitations of findings unsupported by significant evidence--or at least significant new evidence--makes it less likely that the court would sustain the enactment against a constitutional challenge.

Even at that, the emphasis in section 1(a) of the committee substitute is overwhelmingly on the purported effect of marijuana on the individual. By itself, that is probably not enough, as Keith Levy has claimed, to

meet the test of Ravin, i.e., that the record show that the legislature's deliberations found "a close and substantial relationship of the intrusion to a legitimate governmental interest." The opinion makes it quite clear that government may not "simply decide what is in a person's best interest and then compel it." The burden, the court has made clear, is on the government to demonstrate that "the public health or welfare will in fact suffer if the controls are not applied."

I am not prepared to speculate on how the court would rule on this bill. In candor, however, like Keith Levy, I have serious reservations. This office has previously addressed the question of the constitutionality of this and similar legislation (HB 698, 13th Legislature; SB 163, 14th Legislature), and our conclusions have been consistent. Now, despite the Senate HESS committee's revision of the findings as it produced the committee substitute, I cannot conclude that the HESS committee substitute meets the Ravin tests. Suffice to say that, without reviewing the specific testimony that the senate committee received last year as it considered the bill, it should be clear that bill findings that are unsupported by rigorous examination by the legislative committee that authored them would surely be insufficient to meet the burden of the Ravin test. But even if the underlying evidence is sufficient in that regard, it is far from clear to me that the evidence offered compels the conclusion the state may now act to prohibit possession of marijuana for a reason related to the public health or public welfare.

The House HESS Committee reported no legislation, so I do not have a record of committee action on which to base a review. Absent a record, any conclusion drawn as to the evidence presented and submitted as proposed "Findings" would be only the observations and conclusions of the individual who prepares them.

But more serious, in my view, is the fact that nothing in the amended or modified "Findings" (and that is the basis of bill section 1 in the accompanying draft) satisfies my concerns as to the points I expressed last year. On the basis of these revisions, I cannot say that the state legislature has met its burden of identifying "a close and substantial relationship of the intrusion [into individual

Senator Paul Fischer
Page 7
December 12, 1988

privacy] to a legitimate governmental interest." I am concerned that the recitations in the proposed "Findings" lack the requisite "proof that the public health or welfare will in fact suffer if the controls are not applied."

As you might anticipate, my conclusion is this: revision of CSSB 32 (HESS), modified by amended "Findings" having a basis in the House HESS hearings of April and May, 1988, falls short of meeting the Ravin test and makes it virtually certain that the bill draft accompanying this memo does not meet the burden of that decision. For the reasons identified in Ravin and discussed in the material extracted above, I am of the view that the bill draft accompanying this memorandum would be found unconstitutional.

If you have questions relating to the memorandum or the bill draft please contact me.

Enclosure

JC:gc/mi
WKG4/119

STATE OF ALASKA
THE LEGISLATURE

POUCH Y STATE CAPITOL
JUNEAU, ALASKA 99811
907 465 3800

LEGISLATIVE AFFAIRS AGENCY

MEMORANDUM

December 15, 1988

SUBJECT: Federal marijuana possession penalties
TO: Representative Alyce Hanley
FROM: Jack Chenoweth
Legislative Counsel

In a mid-November request to Legal Services Division Director Tam Cook, you asked this office to review applicable federal law and to advise you as to the specific amounts of marijuana in one's personal possession that might trigger imposition of different criminal penalties. You asked specifically that the review take into account the recently enacted "Anti-Drug Abuse Act of 1988," (P.L. 100-690).

I have received from Senator Murkowski's office a copy of the federal act and have reviewed it with reference to existing federal law.

Federal penal provisions covering possession of marijuana distinguish between trafficking (i.e. possession for purposes of dispensing or distribution) and simple possession. The distinctions, and the related penalties, derive from a series of recent Congressional acts, including the Controlled Substances Act (P.L. 91-513), the "Controlled Substances Penalty Act of 1983," part of the more general Comprehensive Crime Control Act of 1984 (P.L. 98-473), and the Anti-Drug Abuse Act of 1986 (P.L. 99-570). The last, the 1986 Act, significantly stiffened the penalties invoked for conviction of either trafficking or possession. Under that Act, first offense convictions result in imposition of the following penalties:

-- for possession of 1000 kilograms [2,200 pounds] or more of marijuana for purposes of trafficking, one could be fined up to \$4,000,000 and imprisoned for at least 10 years (with a higher term of imprisonment imposable if the trafficking resulted in loss of life

or serious bodily injury resulted from use of the substance)({21 U.S.C. 841(b)(1)(A)(vii)});

-- for possession of 100 - 1000 kilograms [220 - 2,200 pounds] of marijuana for purposes of trafficking, one could be fined up to \$2,000,000 and imprisoned for not less than five or more than 40 years (with a mandatory 20 year minimum term of imprisonment for offenses resulting in death or serious bodily injury)({21 U.S.C. 841(b)(1)(B)(vii)});

-- for possession of 50 - 100 kilograms [110 - 220 pounds] of marijuana for purposes of trafficking, one could be fined up to \$1,000,000 and imprisoned for not more than 20 years (with a mandatory 20 year minimum term of imprisonment for offenses resulting in death or serious bodily injury)({21 U.S.C. 841(b)(1)(C)});

-- for possession of less than 50 kilograms [110 pounds] of marijuana for purposes of trafficking, one could be fined up to \$250,000 and imprisoned for not more than 5 years, with provision made for supervised release for a significant portion of the jail term ({21 U.S.C. 841(b)(1)(D)}); and

-- for simple possession of marijuana unrelated to trafficking, one could be fined a minimum of \$1,000 and not more than \$5,000, and jailed for a term of not more than one year ({21 U.S.C. 844(a)}).

Second and subsequent convictions carry concomitantly tougher penalties for each of the above.

Under 21 U.S.C. 841(b)(4), a person convicted of violating the trafficking provisions by distribution of "a small amount of marijuana without remuneration" could be treated as if convicted of violation of the "simple possession" provision, that is, required to pay a fine and jailed for up to one year. I found no definition of the phrase "small amount of marijuana."

With respect to marijuana, the principal thrust of P.L. 100-690 was to authorize use of a system of civil fines of up to \$10,000 as penalties imposable upon persons possessing illicit drugs for personal use. The specific provision, sec. 6486(a) of the 1988 Act, reads as follows:

Representative Alyce Hanley
Page 3
December 15, 1988

Any individual who knowingly possesses a controlled substance that is listed in section 401(b)(1)(A) of the Controlled Substances Act (21 U.S.C.841(b)(1)(A)) in violation of section 404 of that Act (21 U.S.C.841(b)(1)(A)) in an amount that, as specified by regulation of the Attorney General, is a personal use amount shall be liable to the United States for a civil penalty in an amount not to exceed \$10,000. [Emphasis added.]

The next subsection specifies that, in determining the amount of the penalty, "the income and net assets of [the] individual shall be considered." Related provisions of the 1988 Act spell out limitations on the civil fine process, authorize judicial review of a civil penalty order, and authorize, in certain instances, dismissal of proceedings against persons who pay the fine and have no further involvement with drug use.

I cannot find in the 1988 enactment any change or adjustment in the amounts of marijuana specified that affects imposition of the criminal penalties summarized above.

JC:lmb/mi
L6/137

STATE OF ALASKA
THE LEGISLATURE

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LEGISLATIVE AFFAIRS AGENCY

MEMORANDUM

January 12, 1989

SUBJECT: House Bill 22 -- sectional analysis
TO: Representative Alyce Hanley
FROM: Jack Chenoweth
Legislative Counsel

This bill "criminalizes" the possession of small amounts (less than eight ounces) of marijuana, making that possession a class B misdemeanor.

The draft combines a "Findings" statement prepared at your direction, and substantive provisions that duplicate what was introduced in 1987 as Senate Bill 32. I have added two sections, appearing as bill sections 3 and 4, as technical amendments made to conform existing laws to the changes proposed in the substantive sections.

Background:

The following information may be useful.

Under a 1968 revision of the drug laws and until amended in 1975, possession of marijuana for personal use was a criminal offense that carried a penalty of up to one year in jail and a fine of not more than \$1,000.

The criminal code classifies marijuana as a schedule VIA controlled substance, the only substance within that classification. Under current law,

-- possession of eight ounces or more of marijuana anywhere constitutes misconduct involving a controlled substance in the fifth degree, and is defined as a class A misdemeanor, AS 11.71.050(a)(3); for the violation of a class A misdemeanor, one may be imprisoned for up to one year and be fined not more than \$5,000;

-- possession of four ounces or more of marijuana constitutes misconduct involving a controlled substance in

the sixth degree, and is defined as a class B misdemeanor, AS 11.71.060(a)(4); for the violation of a class B misdemeanor, one may be imprisoned for up to 90 days and be fined not more than \$1,000;

-- possession in a public place of one ounce or more of marijuana but less than four ounces also constitutes misconduct involving a controlled substance in the sixth degree, AS 11.71.060(a)(1), a class B misdemeanor.

Also, under current law, possession of less than one ounce in a public place is a violation. AS 11.71.070. A "violation" is an offense that is not criminal. For conviction of a violation, no jail sentence may be imposed. See AS 11.81.900(a)(56). A fine may be imposed. While, generally, the maximum fine for a violation may not exceed \$300, AS 12.55.035(b)(5), under current law applicable to possession of small amounts of marijuana, the fine may not exceed \$100. AS 11.71.070(b).

Based in part on a state Supreme Court decision, Ravin v. State, 537 P.2d 494 (Alaska, 1975), possession of less than four ounces of marijuana other than in a public place is not currently defined as a criminal offense. In other words, no provision defines as criminal possession of less than four ounces if that possession occurs other than in a public place.

Principal provisions of this bill:

Sections 2 and 5 are the operative provisions of the legislation.

As drafted, bill section 2 principally affects "simple" possession. It makes a possession of up to eight ounces, or one-half pound, of schedule VIA controlled substance a class B misdemeanor. (As earlier noted, possession of eight ounces or more is, and would remain, a class A misdemeanor.) At the same time, as to other current marijuana possession provisions, this bill repeals one paragraph, paragraph (2), that defines possession within a propelled vehicle, and two other paragraphs, paragraphs (3) and (4), that eliminate distinctions on possession by persons under 19 years of age, and by persons possessing four or more ounces.

If enacted, the effect of the changes made by bill section 2 would be to make simple possession of less than one-half

Representative Alyce Hanley
Page 3
January 12, 1989

pound by anyone, in any location, subject to the criminal penalty. No distinction would remain as to possession in a propelled vehicle, and, of course, a distinction based on possession of four or more ounces or less than four ounces would no longer be necessary.

By way of enforcement, if a law enforcement officer finds evidence of possession, the person in possession may be criminally charged.

Bill section 5 repeals AS 11.71.070(a), misconduct involving a controlled substance in the seventh degree, a section that addresses possession of very small amounts of marijuana for sale or in public places. These situations or circumstances are addressed in AS 11.71.060, as revised by bill section 2.

*

The operative provisions are, as I've noted, based on last legislature's SB 32. When drafted and offered in late 1986 for introduction in the 1987 session, the draft of SB 32 was accompanied by a memorandum that said:

The accompanying bill draft was prepared in response to your request for a draft patterned after [the 14th Legislature's] SB 163. This draft makes the possession of any amount of marijuana illegal. The proposed amendment to AS 11.71.060(a) specifically concerns possession of any amount less than one-half pound and makes it a misdemeanor.

This provision conflicts with the right to privacy under art. 1, sec. 22 of the Alaska Constitution. In the case of Ravin v. State, 537 P.2d 494 (Alaska, 1975), the Alaska Supreme Court ruled that this right to privacy within the home prevailed over an inadequately compelling governmental interest in preventing marijuana possession and use by adults in the home. The policy arguments made in the bill are not, in my opinion, sufficiently weighty to overcome the constitutional protection recognized in the Ravin decision.

Substantively, all that is different between the 1987 bill draft and the one that accompanies this memorandum is the "Findings" provision, bill section 1.

The changes made are significant. The changes are based upon an editing of the findings set out in the earlier ver-

Representative Alyce Hanley
Page 4
January 12, 1989

sion, together with addition of material based, in part, on testimony obtained by the House Health, Education, and Social Services Committee.

The question set out in the memo I prepared last year and that is quoted above, applicable to the 1987 version of this legislation, remains: Does the right to privacy in the home prevail over the governmental interest stated in the "Findings" section as revised in April and May of 1988, the basis of this bill draft?

Last session, speaking to the Senate-passed version, CSSB 32 (HESS), I wrote

In Ravin, the court acknowledged that the right of privacy is limited by the "legitimate needs of the State to protect the health and safety of its citizens." 537 P.2d 494 at 501. Responding to the evidence marshalled by the state in defense of its prosecution, the court determined that

. . . It appears that effects of marijuana on the individual are not serious enough to justify widespread concern, at least as compared with the far more dangerous effects of alcohol, barbiturates, and amphetamines. Moreover, the current patterns of use in the United States are not such as would warrant concern that in the future consumption patterns are likely to change.

Ravin, supra., at 509 - 510. The court did not close the door to debate or to the adoption of legislation that would survive constitutional scrutiny:

Research is continuing extensively. Scientific doubts persist, however, and that fact has significance for our application of the law. It is a long-standing rule of law that statutes designed to protect the public health will receive a liberal construction. . . . There is a presumption in favor of public health measures; when there is substantial doubt as to the safety of a given substance or situation for the public health, controls intended to obviate the danger will usually be upheld.

Ravin, supra., at 510. But, the court concluded:

. . . no adequate justification for the state's intrusion into the citizen's right to privacy by its prohibition of possession of marijuana by an adult for personal consumption in the home has been shown. The privacy of the individual's home cannot be breached absent a persuasive showing of a close and substantial relationship of the intrusion to a legitimate governmental interest. Here, mere scientific doubts will not suffice. The state must demonstrate a need based on proof that the public health or welfare will in fact suffer if the controls are not applied. [Emphasis added]

Ravin, supra. at 511.

In my handling of the drafting and related legal work that attaches to the privacy issue, I have tried to remind legislative committees that the court's decision in Ravin necessitates that the legislature needs to try to meet the burden placed on the state to "demonstrate a need based on proof that the public health or welfare will in fact suffer if [the proposed] controls are not applied." What is in balance is, as the court has said

. . . the general proposition that the authority of the state to exert control over the individual extends only to activities of the individual which affect others or the public at large as it relates to matters of public health or safety, or to provide for the general welfare. . . . The state cannot impose its own notions of morality, propriety, or fashion on individuals when the public has no legitimate interest in the affairs of those individuals. . . .

Ravin, supra., at 509.

In this legislation, then, the "findings" are quite important. Bill section 1 of each version purports to set out factual conclusions from which the legislature has decided to proceed to "recriminalize" marijuana. The content of these findings may well determine whether the legislation passes constitutional muster.

Other provisions:

Bill sections 3 and 4 are technical conforming amendments.

Representative Alyce Hanley
Page 6
January 12, 1989

The legislation is given an immediate effective date by bill section 6.

*

If the analysis prompts questions, please contact me.

JC:gc
WKG5/084



Senator Paul A. Fischer
Alaska State Senate

RESOLUTIONS/STATEMENTS FOR RECRIMINALIZATION OF MARIJUANA

EDUCATION RELATED ORGANIZATIONS

- Anchorage School District
- Galena City School District
- Galena School District Board of Education
- Haines Borough School Board of Education
- Juneau City and Borough School District
- Juneau Douglas High School Student Council
- Kenai Peninsula Borough School District
- Kenny Lake High School
- Ketchikan Gateway School District
- Northwest Arctic Borough School District
- Wrangell Junior and Senior High School
- Alaska Parent Teacher Association
- Association of Alaska School Boards
- Alaska Association of Secondary School Principals
- Alaska Association of School Governments/General Assembly
- Alaska Association of School Governments/Student Leaders
- Alaska Municipal League
- Alaska State PTA Association

LAW AND RELATED ORGANIZATIONS

- Anchorage Police Department
- Alaska Peace Officers Association
- Anchorage Crime Commission
- Galena City Drug Task Force
- Galena City Police Department
- Juneau Police Department
- Department of Public Safety
- FBI National Academy Associates-Alaska Chapter
- Wrangell Police Department
- Alaskans for Drug Free Youth
- Michael R. Spain/United States Attorney
- Anchorage Crime Commission
- Sitka Police Department
- Alaska Association of Chiefs of Police

OTHER ORGANIZATIONS

- Boys and Girls Clubs of America
- Central Council (Tlingit and Haida Indian Tribes of Alaska)
- Cook Inlet Council on Alcohol and Drug Abuse
- Ketchikan Elks Lodge #1429
- Ketchikan Rotary Club 200
- Kiwanis Clubs of Anchorage
- Valdez Rotary Club
- Wrangell Junior and Senior High Schools
- Rotary International
- Ketchikan Soroptomists
- Tongass Baptist Association/Southeast Alaska
- Safa Homes-Juneau
- Juneau Alliance of the Mentally Ill
- Juneau Elks Lodge 420

MUNICIPALITIES

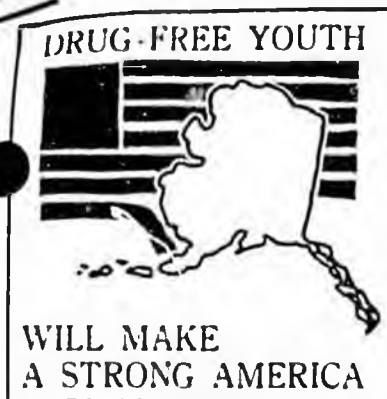
- City and Borough of Juneau
- Municipality of Anchorage
- City of Ketchikan
- City of Galena
- Toqiak City Council
- City of Saxman
- City of Valdez
- City of Haines
- City of Toqiak
- Northwest Arctic Borough Assembly
- City and Borough of Sitka
- City of Wrangell
- Alaska Municipal League

CHAMBER OF COMMERCE

- Anchorage Chamber of Commerce
- Greater Sitka Chamber of Commerce
- Juneau Chamber of Commerce

POLITICALLY RELATED

- 1986 Republican Party Convention Platform
- Senator Frank Murkowski/ Alaska Congressional Delegation



Alaskans for Drug-Free Youth

FEB 06 1989

An Affiliate Member of the National Federation of Parents for Drug-Free Youth.

RESOLUTION IN SUPPORT OF SB18 & HB22 "An Act Relating to Marijuana..."

WHEREAS - Alaskans for Drug-Free Youth are concerned about the prevalent use of the drug marijuana.

WHEREAS - Adults may now possess up to 4 oz. of marijuana for their own personal use in their homes, even though in these homes may reside children.

WHEREAS - Research has demonstrated that marijuana usage is occurring more frequently in earlier age groups.

WHEREAS - The metabolites of marijuana are fat and lipid soluble and may remain in the body for extended periods of time.

WHEREAS - The THC content of street samples of marijuana generally have increased in potency from approximately less than one percent at the time of the Ravin Decision in 1975 to as high as 15.30 percent of samples taken from police-confiscated marijuana in Ketchikan during 1988. The Ravin Case in reference to higher potency levels in the future, states, "if such a shift were to occur, then marijuana use could be characterized as a serious health problem."

WHEREAS - Recent research has yielded findings that demonstrate that marijuana may have a detrimental effect on respiratory and cardiovascular systems, on reproductive systems, on the brain, and on the body's immune system.

WHEREAS - SB18 and HB22 address these health findings.

WHEREAS - The State of Alaska statutes pertaining to marijuana are not in conformity with National and International Laws.

WHEREAS - The Supreme Court of Alaska has stated that "no one has the right to do things in their own home which will affect others adversely." *

BRISTOL BAY AREA HEALTH CORPORATION

P.O. BOX 130 • DILLINGHAM, ALASKA 99576

(907) 842-5201 or (907) 842-5202

February 2, 1988

The Honorable Senator Fischer
Rm. 508, Capitol
P.O. Box V, Juneau 99811

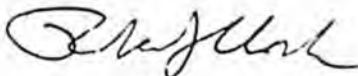
Dear Senator Fischer,

My Organization on behalf of the 32 villages in the Bristol Bay Area that we by Resolution are authorized to represent for all health matters, wants you to know that we fully support S.B. 18 "for the act relating to marijuana; and providing for an effective date".

You can count on our support and count on us as one of the many (we hope) in favor of your proposed bill, as well as H.B. 22.

Thank you and good luck.

Sincerely,



Robert Clark
Executive Director

cc: Jay Toth, C.O.O.
Christy Tilden, Alcohol Program
Executive Committee
Representative Jacko
Senator Zharoff

JAN 11 1989



ALASKA ASSOCIATION OF ELEMENTARY SCHOOL PRINCIPALS
 ALASKA ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS
 ALASKA ASSOCIATION OF SCHOOL ADMINISTRATORS

• ALASKA COUNCIL OF SCHOOL ADMINISTRATORS •
 326 Fourth St., Suite 408 Juneau, Alaska 99801 586-9702

RESOLUTION FOR THE RECINDING OF LAW ALLOWING GROWTH AND POSSESSION OF MARIJUANA IN ALASKA

The Alaska Council of School Administrators urges the Legislature and Governor to pass legislation to recind the current law regarding marijuana.

RATIONAL:

- (A) The problem of drug and alcohol abuse by our society, particularly by children in our schools, is rising.
- (B) The President of the United States has asked for a national crusade to help solve this problem.
- (C) Many of the students using drugs, particularly marijuana, obtain it from homes where parents grow their own marijuana for personal use.
- (D) There is substantial proof that marijuana is harmful to health and safety of it's users.
- (E) There is a common perception by youth and others that the current Alaska Statutes "legalize" marijuana, and this misperception has a social effect that is detrimental to the public health and welfare in that it encourages drug use.
- (F) We have observed young people use marijuana and have had to deal first hand with it's effects to learning and behavior.

TANANA CHIEFS CONFERENCE, INC.
Board of Directors
Resolution 88-74

RECRIMINALIZATION OF MARIJUANA POSSESSION AND SALE
OF DRUG PARAPHERNALIA

WHEREAS, the sale and public use of marijuana, and possession by minors are already illegal under Alaska State statutes; and,

WHEREAS, possession and use of small amounts of marijuana in an individual's personal residence have been legal in Alaska since a 1975 Supreme Court ruling on privacy; and,


WHEREAS, it has been clearly indicated that use of marijuana poses a hazard to the health of the individual user, increases the risk of accidental death and injury, and contributes to community crime and social problems; and,

WHEREAS, the present legality of home possession of marijuana and sale of drug paraphernalia sends the wrong message to young people making critical choices about personal behavior;

NOW THEREFORE BE IT RESOLVED that the Tanana Chiefs Conference, Inc. Board of Directors hereby supports enactment of legislation by the State of Alaska reinstating the illegality of possession of any amount of marijuana at any time, and making the sale of drug paraphernalia illegal in Alaska.

C E R T I F I C A T I O N

I hereby certify that this resolution was duly passed by the Tanana Chiefs Conference, Inc. Board of Directors on March 17, 1988 at Fairbanks, Alaska and a quorum was duly established.


Daisy Northway
Secretary-Treasurer
Tanana Chiefs Conference, Inc.

Submitted by: TCC Executive Board

accompanied by a small appropriation to DHSS to fund its planning and implementation. DHSS might be encouraged to use these funds to develop common district boundaries for all major DHSS grant programs.

MARIJUANA - Contact Persons: Mike Walleri, Lisa Jaeger,
Paul Sherry

The Tanana Chiefs Conference is opposed to liberal marijuana laws. The Conference feels that the present leniency of laws regarding home possession of marijuana and sale of drug paraphernalia sends the wrong message to young people making critical choices about personal behavior. If the laws regarding marijuana possession statewide cannot be tightened in the political arena, Tanana Chiefs villages have expressed an interest in more local control of marijuana in the villages. The matter of reinstating the illegality of possession of marijuana under state law could be addressed by individual communities through a local option election process similar to the local option law for possession of alcohol. The main issue is a problem of enforcement. When communities make the decision to ban possession of marijuana as a whole there is more resolve to cooperate with the decision. Enforcement costs are also community related.

Resolution of the Alaska Municipal League

Resolution No. 89-54

**A RESOLUTION SUPPORTING REPEAL
OF AS 11.71.070 AND AMENDMENT OF
AS 11.71.060(a) TO MAKE MARIJUANA ILLEGAL**

WHEREAS, the Alaska Municipal League recognizes the serious individual and public safety problems that exist in all communities in Alaska as a result of substance abuse (*AML Policy Statement: Part III, Public Safety; D. State Assistance*), and

WHEREAS, Alaska is the only state in the union with a permissive statute for personal possession of marijuana, and

WHEREAS, findings of local, state and federal authorities conclude that marijuana is detrimental to the health, welfare, and public safety of all people, and

WHEREAS, the Supreme Courts of other states and the U.S. Supreme Court have upheld state statutes prohibiting the use and possession of marijuana, and

WHEREAS, current Alaska state statutes are not in conformity with federal drug enforcement laws controlling drug abuse, and

WHEREAS, the conflict between federal and state law pertaining to marijuana causes unnecessary barriers for local police and Alaska State Troopers in protecting the public from drug abusers, and

WHEREAS, the Anchorage Crime Commission has for the past three years concluded that Alaska's permissive laws on marijuana should be repealed, and

WHEREAS, representatives of 60 Alaskan high schools at the Alaska Association of School Governments' Annual Fall Conference on October 18, 1986, unanimously passed a resolution to repeal the current marijuana law and make the drug in all its forms illegal in Alaska;

NOW, THEREFORE, BE IT RESOLVED that the Alaska Municipal League urges the Governor of the State of Alaska and the Alaska State



P.O. BOX 189
ANGOON
ALASKA
99820

PHONE:
(907) 788-3653

RESOLUTION NO. 89-03

WHEREAS, Angoon is a Second Class incorporated City under the State of Alaska, and

WHEREAS, laws that govern the State of Alaska directly impact the laws that govern the municipality of Angoon, and

WHEREAS, the law that allows the possession of any amount of marijuana has a negative impact with the Community of Angoon and the School System, and

WHEREAS, the City of Angoon has a strong position that people who are involved with the importation of illegal drugs should be dealt with in a criminal manner, and

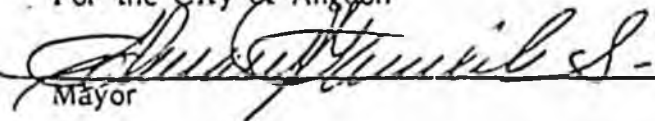
WHEREAS, the State of Alaska has the governing power to develop the laws that can assist the municipalities and School Districts to cope with the existing "drug problem" that appears to be growing annually;

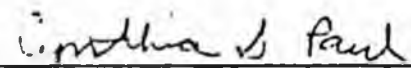
NOW THEREFORE BE IT RESOLVED: That the Alaska State Legislature make it illegal to possess any amount of marijuana;

BE IT FURTHER RESOLVED: That any person involved in the trafficking of illegal drugs be charged with a criminal offense.

Passed at a City Council Meeting held on January 31, 1989 by a vote of 5 Yeas,
0 Nays, 2 Absent, 0 Abstain.

For the City of Angoon


Mayor

ATTEST: 
City Clerk

SEAL



MARIJUANA INITIATIVE COMMITTEE
CONTACT SHEET

1. Ms. Marie Majewske
Marijuana Initiative Committee Chairperson
4002 Kingston Circle
Anchorage, AK 99504
333-0717 ✓
2. Mr. Ken Griffin
Alaskans for Drug Free Youth
8231 Summerset Drive
Anchorage, AK 99518
349-7259 ✓
3. Ms. Linda Adams
Alaskans for Drug Free Youth
P.O. Box 7171
Ketchikan, AK 99901
247-2273
4. Ms. Sandy Spargo
Alaskans for Drug Free Youth
965 Goldbelt
Juneau, AK 99801
586-2392 (w)
586-6122 (h)
5. Mr. Edward Young
Anchorage Crime Commission
415 F Street
Anchorage, AK 99501
279-8894 ✓
6. Mr. Gary Hutchison
Kids Come First
367 Leann
Fairbanks, AK 99701
456-6676 (w)
456-1531 (h)
7. Ms. Marsha Haas
Community Action for Drug Free Youth
8040 Summerset Drive
Anchorage, AK 99518
258-0201 (w)
344-7059 (h) ✓
8. Ms. Maureen Cowles
Executive Board of Anchorage Council of PTAs
17433 Kantishna Drive
Eagle River, AK 99577
694-3160 ✓

*Carol Stapper is
the President*

CORRECTION

**THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY**

Resolution of the Alaska Municipal League

Resolution No. 89-54

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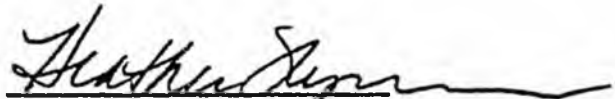
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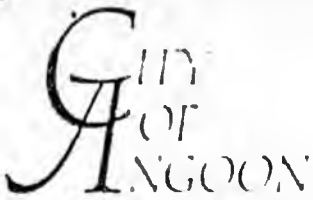
Legislature to take immediate steps to repeal statutory protections for the use and possession of marijuana in the State of Alaska in order to promote the general health, welfare, and public safety of the citizens of the State of Alaska.

Adopted this 18th day of November 1988 in Fairbanks, Alaska.


Heather Flynn, President

ATTEST:


Scott A. Burgess, Executive Director



P.O. BOX 189
ANGOON
ALASKA
99820

PHONE:
(907) 788-3653

RESOLUTION NO. 89-03

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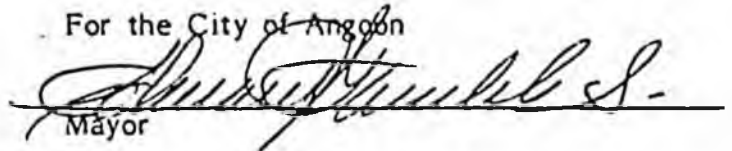
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0 Nays, 2 Absent, 0 Abstain.

For the City of Angoon


Mayor

ATTEST: Cynthia S. Paul
City Clerk

SEAL



MARIJUANA INITIATIVE COMMITTEE
CONTACT SHEET

1. Ms. Marie Majewske
Marijuana Initiative Committee Chairperson
4002 Kingston Circle
Anchorage, AK 99504
333-0717 ✓
2. Mr. Ken Griffin
Alaskans for Drug Free Youth
8231 Summerset Drive
Anchorage, AK 99518
349-7259 ✓
3. Ms. Linda Adams
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456-1531 (h)
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8040 Summerset Drive
Anchorage, AK 99518
258-0201 (w)
344-7059 (h)
8. Ms. Maureen Cowles
Executive Board of Anchorage Council of PTAs
17433 Kantishna Drive
Eagle River, AK 99577
694-3160 ✓

*Carol Stippe is
the President*

MARIJUANA INITIATIVE COMMITTEE CONTACT SHEET

Page 2

9. Mr. Eugene Harnett
11247 Borealis Street
Eagle River, AK 99577
696-0096 (w)
694-0437 (h)
10. Representative Terry Martin
Alaska House of Representatives
3960 Reka Drive, #B6
Anchorage, AK 99508
561-2035 (w)
333-6990 (h)
11. Representative Alyce Hanley
Alaska House of Representatives
4007 Brentwood Circle
Anchorage, AK 99502
561-2033 (w)
243-7574 (h)
12. Mr. David Renkoski
3541 Stanford
Anchorage, AK 99504
279-9634
13. Representative Walter Furnace
Alaska House of Representatives
P.O. Box 1542
Anchorage, AK 99510
561-2039
14. Linda Douglas
Just Say No!
810 S. Pine Street
Anchorage, AK 99508
338-0189

init.laj
1/89



Alaskans for Drug-Free Youth

An Affiliate Member of the National Federation of Parents for Drug-Free Youth.

February 23, 1989

Chris Christensen
Judiciary Aide
Senate Judiciary Committee
P.O. Box V
Juneau, Alaska 99811

Dear Chris:

I will not be able to testify before the Senate Judiciary Committee today because of the demands of my job. Would the Committee accept the enclosed information which contains the following:

- Treatment of Marijuana Dependence: Preliminary Results, from the University of Washington School of Social Work, printed in the Journal of Psychoactive Drugs, January-March, 1988.
- Strategies for Breaking Marijuana Dependence, by Joan Ellen Zweben, Ph.D., Executive Director of the Pacific Institute for Clinical Training, Education, and Consultation; and Kathleen O'Connell, Ph.D., Clinical Psychologist. Both of the doctors are located in California.
- Marijuana: A Second Look at Health Hazards, by the American Lung Assoc.
- Marijuana More Potent--Still Harmful, addressing THC content from the University of Mississippi.
- Death on the "High"-Ways, Driving on Drink and Pot, by Peggy Mann, a Public Service of District 22-C, Lions Clubs International Drug Awareness Program.
- Statewide Drug Seizures from January 1, 1986, through June 30, 1987, from the State of Alaska Department of Public Safety.
- People Who Didn't Say No, Vital Statistics printed from the U.S. News and World Report, March 21, 1988, regarding "emergency-room visits" involving marijuana.

CONTINUED ON NEXT PAGE

- "Legalizing Drugs Holds Little Appeal in Europe," from the Sunday Star-Ledger, June 5, 1988, copied by the New Jersey Federation for Drug-Free Communities. This article refutes Europe's success in legalizing marijuana and heroin.
- Statement by Caren Robinson, then Executive Director of Aware, of the number of juvenile arrests relating to marijuana possession, for statewide arrests in 1981.
- Alaska Council on Domestic Violence and Sexual Assault-Use of Alcohol or Drugs at the Time of Abuse, for FY87.

Your help to recriminalize marijuana is very appreciated.

Sincerely,

ALASKANS FOR DRUG-FREE YOUTH, INC.



Sandy Spargo
Vice President/Juneau Chapter
965 Goldbelt
Juneau, Alaska 99801

cc: Senator Faiks
Senator Halford
Senator Pearce
Senator Rodey
Senator Szymanski

MARIJUANA MORE POTENT -- STILL HARMFUL

Advanced growing techniques and marijuana hybrids are now yielding not only a more potent form of pot, but also new types of the drug that can produce specific effects on the user. The National Institute on Drug Abuse (NIDA) has been monitoring the Tetrahydrocannabinol (THC) content of marijuana through the School of Pharmacology, University of Mississippi, and have found contemporary marijuana to be four times the strength of pot available in the mid 1970's.

In 1976 the monitoring project showed an average THC content of 1%. The potency of marijuana then climbed steadily to an average of 5.5% in 1985. Some of the more specific marijuana types such as Sensimilla averaged a higher TCH content, ranging from 6 to 7%. Some of the Sensimilla samples tested out as high as 14%.

Marijuana has become a more socially acceptable drug of use over the years, particularly with adolescents and young adults. Comedian, George Carlin, said, "Grass doesn't make you sick, your breath doesn't stink, and you don't puke on your shoes." Unfortunately, the high level of social acceptance ignores the inherent problems found in any mood-altering drug usage. Like alcohol, marijuana use can cause multiple problems for the user and those around him/her. With more potent marijuana available it might be accurate to assume the problems experienced by the marijuana user will also be compounded.

Community Update, November 1987
New Connection Programs, Inc.
73 Leech Street
St. Paul, MN 55102

NAHAS, GABRIEL GEORGES; Physiologist, pharmacologist and educator.

QUALIFICATIONS: B.A. University of Toulouse (France) 1937.
 H.D. (cum laude) University of Toulouse Medical School, 1944.
 M.S. Physiology, University of Rochester, 1949.
 (Rockefeller Fellow 1947-48)
 Ph.D. Physiology, University of Minnesota Medical School, 1953.
 (Mayo Foundation Fellow 1949-50)
 Minnesota Medical License, 1953.
 New York Medical License, 1967.

POSITIONS: Assistant Professor, Physiology, University of Minnesota, 1955.
 Chief, Respiratory Section, Department of Cardiorespiratory
 Diseases, Walter Reed Army Institute of Research, 1957-59.
 Lecturer, Physiology, George Washington Medical School, 1959-62.
 Associate Professor and Director of Research, Department of
 Anesthesiology, College of Physicians & Surgeons,
 Columbia University, 1959-62.
 Professor, Department of Anesthesiology, Research, College of
 Physicians & Surgeons, Columbia University, 1962 to present.
 Fulbright Scholar.
 Attending Anesthesiologist, Presbyterian Hospital, 1967 to present.
 Adjunct Professor, Anesthesiology Institute, University of Paris,
 Faculty of Medicine.

MEMBERSHIPS: Board of Advisors, Cousteau Society.
 Consultant, United Nations Commission on Narcotics.
 Distinguished Visiting Scientist, Addiction Research Center, N.I.D.A.
 American Physiological Society; American Society for Pharmacology
 & Experimental Therapeutics; New York Academy of Sciences (Fellow);
 Sigma XI; Association of French Speaking Physiologists; British
 Pharmacological Society; AAAS (Fellow); Medical Advisory Boards of
 the Councils on Circulation and on Basic Sciences of the American
 Heart Association; Chairman, Section of Biological Medical Sciences,
 N.Y. Academy of Sciences (1963-64); National Research Council (1963-
 1966); The Harvey Society; American Society for Clinical Pharmacology;
 American College of Toxicology; Laureate, French Academy of Medicine;
 Scientific and Medical Advisor to N.F.P. and P.R.I.D.E.

HONORS: Presidential Medal of Freedom with Gold Palm (United States);
 Commander, Legion of Honor, Croix de Guerre with 3 Palms (France);
 Order of the British Empire (Great Britain); Order of the Orange
 Nassau (Netherlands); Silver Medal of the City of Paris; Medal of Honor
 Award for Centennial of the Statue of Liberty, 1986.

RESEARCH: Medical instrumentation, pharmacology of THAM; physiology of acid
 base regulation; blood plasma substitutes; pharmacology of
 cannabis and cocaine; epidemiology of drug dependence.

PUBLICATIONS: Author of over 550 scientific publications (more than 100 of them
 on the subject of marijuana and other dependence producing drugs);
 Author of 16 books and monographs including: Marihuana In Science
 and Medicine (Raven Press, New York, 1984), Drug Abuse In the Modern
 World (with H.C. Frick II, Pergamon Press, New York, 1981), Keep Off
 The Grass (3rd Edition, P. Eriksson, Middlebury VT, 1985,
 translated into five languages).

(Compiled from Who's Who In America and Who's Who In the World)

With reference to Senate Bill No. 18:

For an Act entitled: "An act relating to marijuana; and providing for an effective date."

*Section 1 Findings

(1) Marijuana and other cannabis preparations contain more than 420 different compounds, including 60 cannabinoids that have mind-altering properties.

Marijuana contains 421 bioactive chemical molecules, 61 are cannabinoids, which are extremely soluble in fat molecules and become embedded in body cell membranes, inhibiting the flow of necessary chemicals in and out of the cell. (1)

There are 421 known chemicals in cannabis. The most important of these are a group called cannabinoids. The chief mind-altering cannabinoid is delta 9-Tetrahydrocannabinol, referred to as delta-9 or THC. (2) p. 94

Marijuana and hashish as well as their principal active ingredient (THC) produce an intoxicated state marked by altered time sense, euphoria, and at high doses, hallucinations. (3) p. 12

Marijuana contains special chemicals, the cannabinoids which are unique to the plant, 61 of them have been isolated, some are psychoactive like THC and others are not. (4)

(2) The breakdown products or metabolites of marijuana are fat and lipid soluble and may remain in the body for extended time periods.

THC like DDT is retained in body tissues that have high fat content, including the brain, lungs, liver and the reproductive organs. If one joint is smoked 1/2 of the THC will remain in the body a week later, and measurable amounts a week later. If a person uses marijuana more than once a month the residue levels of THC will be built up in the users body (3) p.68

THC and other cannabinoids are fat soluble and tend to accumulate in fatty tissues of the body, including the brain. Following a single exposure to marijuana, THC may be found in the body up to two (2) weeks. Tolerance develops, necessitating increased dosages with prolonged use and increasing the likelihood of THC accumulation in the body (5) p.10

THC accumulates in and alters the fatty structures of cell membranes (Paton, 1972, Paton, 1975) these fatty materials are vital parts of the membranes functional structure. THC accumulates at the fat interface and causes the film of fatty material to be restricted. This also affects the fine specialized structures of the cell surface through which one grain cell communicates with another, (6) p. 220

Because of the fat solubility of THC, it can be found in the urine for many days after smoking has been stopped. THC has been found in urine of up to about 45 days in chronic or addicted users (7) p.3

(3) The tetrahydrocannabinol (THC) content of street samples of marijuana generally has increased in potency from approximately one to two percent in marijuana obtainable 10 years ago to as high or higher than 5 to 10 percent in marijuana obtainable in 1989.

Beginning in 1983 the potency of the marijuana sold in the U.S. dramatically increased from 1-2% THC to 5-15% THC. Some areas report a 27% THC level. The increase in potency has made today's marijuana much more hazardous (7)

Ketchikan, Alaska samples of marijuana sent to the University of Mississippi Research Institute for testing showed in 1987-4.38% THC for the one sample sent. In 1988 there were 8 samples sent with the following percentages reported: 15.14%, 15.30%, 14.52%, 1.29%, 3.34%, 1.84%, 12.36%, 9.63%. (8)

The marijuana used today is 5-10 times stronger than in the 60's due to plant selection, refined growing and harvesting techniques. In the 60's marijuana with 2% THC was considered "real good grass" now government laboratories have tested confiscated marijuana with a THC content of 14% (9)

Potency of ordinary marijuana is now identical to hashish sold in the U.S. and high quality sinsemilla (much preferred) is twice as strong as hashish (10)

(4) Recent research has yielded findings that demonstrate that marijuana may have a detrimental effect on:

- (A) respiratory and cardiovascular systems, in that
(1) sinusitis, pharyngitis, bronchitis, and emphysema may be associated with chronic marijuana use;

200 American soldiers were studied, heavy smokers of hashish, they showed symptoms of pharyngitis, sinusitis, bronchitis, and asthma (Henderson, et al 1972 (11) p. 125)

McDonald, Donald, Florida pediatrician-Survey 104 youngsters 40 had been taken to the doctor with symptoms of chronic cough, sinus condition, sore throat, laryngitis, chest pains and fatigue. They were told to stop marijuana use-all symptoms eventually disappeared (2)

Chronic cannabis smoking can produce sinusitis, pharyngitis, bronchitis, emphysema and other respiratory difficulties in a year or less opposed to ten to twenty years of cigarette smoking to produce similar complications. Cannabis smoke is far more damaging to lung tissue than tobacco. The damage is described as precarious. Testimony before the senate subcommittee in internal security-observations of Dr. Forest Tennant 1968-1972 (12)

A study comparing marijuana and cigarette smokers found that smoking less than a joint a day decreases specific airway conductance as much as smoking 16 cigarettes per day (Taslikin et al, 1980) Some difference may be due to present day cigarettes being filtered, producing less tar. Marijuana joints are consumed entirely and are unfiltered. Under conditions freely available, joints consumed may approach as high as 10 or more a day (Coker et al, 1976) (13)

(11) habitual marijuana smoking may produce precancerous change in the lung.

One study of fresh cannabis on human tissues (Leuchtenberger, 1982) showed cellular abnormalities developed in the same sequence which occur with tobacco smoke and appeared to be related to components of the vapor phase of the fresh cannabis smoke. Abnormalities in mitosis, DNA complement and chromosomal number, as well as cell proliferation were observed. All these changes were more severe after exposure to cannabis smoke than to tobacco smoke (14)

Cannabis may have significant lung cancer potential; certain naphthalenes, particularly benzopyrene are known to be cancer producing; benzopyrene is reported to be about 70% more abundant in marijuana smoke than in tobacco smoke (Novotny et al, 1976) (13)

Considerable evidence to suggest that long-term use may lead to pulmonary cancer. Marijuana has up to 50% more aryl hydrocarbons in its smoke than tobacco and high levels of these are associated with susceptibility to bronchogenic carcinoma. Many people smoke both marijuana and tobacco and it is believed that the combined effects may substantially increase cancer risk (15) p 699

"Marijuana smoke contains 50% more cancer producing hydrocarbons than tobacco smoker" reported 1975 American Health Foundation, N.Y. city and National Cancer Institute, Bethesda. (9)

(iii) during a marijuana "high," the user may experience tachycardia as the heart rate increases to as much as 130-150 beats a minute;

Most striking effects of cannabis in man is dose related tachycardia (fast heart rate) this may cause harm if the person has coronary heart disease, cerebrovascular disease, hypertension and heart failure p 161 (11)

One marijuana cigarette is just as damaging to the heart as five filtered tobacco cigarettes. One joint delivers nearly five times as much carbon monoxide to the blood stream cutting oxygen flow to the heart, promoting coronary artery disease and heart attacks. (16)

(B) reproductive systems, in that

(i) marijuana affects the network of glands and hormones that are involved in reproduction;

Regular marijuana use during at least 2 developmental phases can be detrimental. During fetal development and during adolescence. Harclerve (1984 - Drug Abuse & Drug Abuse) (19)

RESEARCH

Most studies referred to in this research were done on marijuana with low levels of THC i.e. 2% THC- Current marijuana potency is often equivalent to hashish

Athens Greece- Spermatozoa from nonsmokers and from chronic hashish smokers (hashish has a high concentration of THC) were photomicrographed. Normal spermatozoa from a non-hashish-smoking male show a proper density, indicating that it is rich in protein and other essential chemical substances. In the center and right panels, sperm taken from a hashish-smoking male shows a definite breakdown of protein substances and a clumping together of chromosomal material. The research team also noted changes in the ultra structure of the spermatozoa of chronic hashish-smoking males which could result in genetic disturbances or prevent fertilization. (12) p.67

The Effects of Marijuana on the Reproductive System (22)

A study was conducted of 20 young men, 18 to 28 years of age, who used marijuana for at least 6 weeks, averaging 9.4 times a week. None of these subjects had ever used other hallucinogenic drugs, had any history of hormone imbalance, or showed evidence of prior liver disease. Twenty similarly-screened young men who did not use marijuana served as controls. The important finding from this study was that testosterone, the principal male hormone, was reduced by about 44% in the male marijuana users. Testosterone plays an important role in the secondary sexual changes that occur during adolescence and in the reproduction of sperm by the adult male. Use of marijuana may delay sexual maturation in teen-aged boys and possibly impair the sexual development of male fetuses being carried by pregnant mothers. Six of the subjects tested also showed highly reduced sperm counts, two were found to be clinically sterile. Additionally, within a small percentage of male marijuana users, who may have already possessed an unusual hormone balance, gynecomastia occurred. Gynecomastia is a feminizing change in which there is considerable enlargement of the breasts.

It is now generally believed that the effects of cannabinoids on the hormones that modulate the reproduction process originate within the brain as a result of changes in such neuro transmitters as dopamine, norepinephrine and serotonin. (19) (78-79)

In the brain, THC seems to affect the hypothalamus, which in turn affects the pituitary, a pea like structure at the base of the brain, which is a control center for sex and reproduction hormones.

THC in marijuana use inhibit the hormone that control development, fertility and sexual functioning. (23) p. 20

An infant girl is born with her life time supply of eggs. If they are damaged there is no replacement. Cannabinoids collect in the ovaries. In a controlled study of 2% THC exposed eggs about 1/2 the eggs died. Of the remaining eggs 30% looked unhealthy (23)

Males- Inhalation by human males of heavy doses of marijuana has been associated with a significant decrease in sperm concentration and total sperm count (33) accompanied by a decline in sperm mobility and increase in abnormal sperm forms (2) pp.521-532 (33)

(ii) a pregnant woman who uses marijuana takes an increased risk that the chemical compounds in the marijuana will pass across the placenta to the developing fetus;

Legal and ethical considerations prohibit the administration of marijuana to young women who might become pregnant. "Marijuana and Reproduction" Dr. Carol Grace Smith, Richardo A. Asch MD 1982 (25)

It is always dangerous to generalize too fully from results with laboratory animals to the human. However it is clear that much of our basic understanding of reproductive physiology and pharmacology has come from studies on laboratory animals. In particular the non human primate has provided an excellent animal model for the human reproductive system. It is apparent that several of the observed changes produced by marijuana THC in animals have also been seen in the few human studies that have been done. 18-p. 18-19 (22)

Studies with laboratory animals and retrospective studies on women who used marijuana during pregnancy show that risks of pregnancy loss and other adverse effects on the fetus are increased by marijuana use. THC crosses the placenta barrier. Significant changes considered with retardation of fetal growth and development have been observed.

THC distributed to many different tissues of fetus. Studies show a greater incidence of pregnancy loss and a decrease of birth weight of viable offspring. Evidence strongly suggests these effects are due to disruption of placental function. (24)

Marijuana use during pregnancy delivered infants with significantly smaller birth weight, body weight and head circumference as well as infants who were 5 times more likely to have features compatible with the fetal alcohol syndrome. (32)

It has been well established that THC easily passes through the placenta. A four year study showed that the more THC added to the placenta the less estrogen was produced. Decreased estrogen results in decreased blood flow to the placenta which means decreased nutrition to the developing baby. (23)

Studies by Hingston et, al. The most common findings on adverse effects of maternal use of marijuana are intrauterine growth retardation, poor weight gain, prolonged labor and behavioral abnormalities in the newborn. Of 10 independent variables such as age, alcohol use, cigarette smoking and race, which were assessed in one study as possible causes of adverse effects, marijuana use was the most highly predictive of fetal malformations. (24)

In another study where considerable efforts were made to isolate marijuana as the only contributory factor, it was found that maternal use of marijuana was the strongest independent predictor of whether a mother delivered an infant with features that were considered to be "compatible with fetal alcohol syndrome"

Table 3 Major malformations among newborns of marijuana users and non-users

Malformation (Type of system)	Marijuana Usage			
	<u>11,176 Non-Users</u>		<u>1,246 Users</u>	
	Number of Malformations	Rate per 1000	Number of malformations	Rate per 1000
Congenital heart disease	26	2.3	7	5.6
Hypospadias	47	4.2	7	5.5
Clubfoot	41	3.7	6	4.8
Upper alimentary tract	13	1.2	3	2.4
Respiratory tract	6	0.5	3	2.4
Genital	3	0.3	2	1.6
Face, neck, and ear	15	1.3	2	1.6
Spina bifida	5	0.5	2	1.6
Hydrocephalus	6	0.5	2	1.6
All other malformations	132	11.7	8	6.7
Total major malformations	294	26.3	42	33.7

source: Linn et al. 1983 p. 82 (19)

(C) the brain, in that

(i) THC may accumulate in brain cell membranes;

an appreciable amount of marijuana is stored directly in the nerve cells of the brain which are 1/3 fat tissue. They steadily damage the brain cells-by degrading cell nutrition and suppressing electrical activity (17)

Dr. Alexander Jakubovic, Canadian, research on rats showed that THC caused significant inhibition of brain cellular action. Repeated doses delayed the cells ability to repair themselves and finally caused enough damage to cause the cell to die p. 209 (2)

Marijuana taken into the body is immediately attracted to and embedded in the lipids in all the cell membranes in the body including the brain cells, hindering membrane transport of energy, nutrients, messages, etc. crippling the cell work (1)

(ii) marijuana and its metabolites may alter neuro-chemicals and their receptor sites;

Brains of monkeys exposed to THC through moderate smoking or intravenously showed striking changes at the synapses or receptor site. There was widening of the space with deposits of dense material in the space p. 5 (18)

Marijuana use diminishes the brain's ability to generate and activate the neuronal circuits. Because of the neurons' chemical complexity, constant activity and speed of operation they are affected more than other body cells by marijuana. (1)

It appears that drugs including marijuana alter neuro transmitters and receptor sites. Previously the symptoms resulting were referred to as brain damage (20)

(iii) use of marijuana may impair visual tracking and depth perception and may reduce coordination, reaction time, and vigilance, making it dangerous to drive, fly, or operate machinery;

Marijuana impairs driving skills for at least 4-6 hours after smoking a single cigarette. When used in combination with alcohol driving skills are more erratic. (Marijuana-NIDA capsules, 8, 1985 NIDA) (21)

"Typical effects of cannabis resemble a transient acute brain syndrome, they include defects in attention span, concentration ability, short term memory, information processing and performance of complex perceptual motor tasks. Thus, accidental injury to persons driving motor vehicles, piloting airplanes, or operating heavy equipment while intoxicated with marijuana is a special concern (15)

Coordination is impaired at doses commonly used in social settings by both novice and chronic users. Tracking (the act of following a moving stimulant) is highly sensitive to effect of marijuana. Impairment occurs at very low doses (weil, et al, 1968) persists for 4-6 hours (Moskowitz, Shannon 1979) ability to detect brief flash of light and shows significant impairment by low to moderate doses (Shaman, Moskowitz 1972,73,74), a substantial risk for users operating machines p 184 (11)

At doses commonly used marijuana impairs memory perception, judgment and fine motor skills, increasing the risk of serious ACCIDENT while performing complex tasks such as driving or operating machinery- Marijuana, NiDA 1986. (21)

(iv) chronic marijuana use, particularly by adolescents, may interfere with reading comprehension, verbal and mathematical problem solving, perception of time and distance, short term memory, and the ability to concentrate, and reduce motivation;

Long term development effects of marijuana use by children and adolescents is of concern. Symptoms documented often described as Amotivational syndrome include loss of ambition, loss of effectiveness, lack of concentration, decline in school or work performance. (NiDA Marijuana- 1986)

One reliable sign of marijuana abuse is in school performance. Symptoms are short-term memory loss, inability to concentrate, loss of motivation making achieving good grades difficult. Abstract thinking suffers most making advanced mathematics, especially difficult. It is speculated by some educators that the recent drop in SATS scores and the increase in drug use are more than coincidental. Lantner, Ingrid, M.D., A Pediatricians View of Marijuana p.10 American Council on Marijuana, 1982

Clinicians use the term amotivational syndrome to describe a set of personality changes commonly seen in daily users of marijuana (PicGlornin & West-1968) Changes include apatny, loss of ambition, loss of effectiveness, lack of concentration, decline in school or work performance. Marijuana and Health p. 124 National academy Press 1982

Marijuana user's school performance deteriorated markedly after frequent use became established. It has been recently demonstrated that alcohol and drug abuse are associated with failure to graduate from high school. Schwartz, Hoffman-Bebarier, Psychosocial and Academic Marijuana Use

(v) the psychological effects of marijuana use may include anxiety, panic, paranoia, psychosis, illusions, and hallucinations, and some studies link marijuana to schizophrenia; and

Psychiatrists describe complications associated with marijuana use: acute adverse reactions, flash backs and prolonged reactions, both psychotic and non psychotic. Marijuana may trigger a schizophrenic reaction in vulnerable individuals. p. 699 (15)

Psychological effects of marijuana use include acute toxic psychosis and acute panic reactions, some of these reactions are excitement, confusion, disorientation, delusions, depersonalization, visual hallucinations, full blown delirium. (Kolanski, H, Moore, M.T. - Effects of Marijuana on Adolescents and Young Adults-JAMA 216: 486-492, 1971) p. 309 (10)

Jacque Moreau - 1804-1884, physicians in France described psychotic symptoms in his patients experimenting with hashish. He especially noted the similarity between schizophrenia and hashish intoxication. Today the marijuana used resembles hashish and also may produce schizophrenic like symptoms in patients. p. 276 (11)

Acute panic and paranoid states are the most commonly observed short term psychological effects of marijuana use (Negrate 1982) anxiety is also a common problem. Short term psychosis has been observed manifested by confusion, impulsive behavior, delusions and distortion of perception. (14)

- (D) the body's immune system, in that marijuana use
- (i) may depress the immune system and alter the fundamental cellular defenses against disease; and
 - (ii) may reduce the chromosomes in T-lymphocyte cells.

There is consistent evidence that THC induces defects in the immune system of mice and rats. The doses used produced very little behavioral effects (14)

T lymphocytes are very important to the immune system. Carefully controlled studies have shown that the rate of division of T- lymphocytes was 44% lower in marijuana smokers than in the controls. If they can not reproduce themselves by division they cannot fight virus, bacteria, cancer, etc p. 199 (11)

Dr. Harold Voth, Psychiatrist "One of the telltale signs of a chronic pot smoker is-they get sick alot" (2)

Pediatrician Ingrid Lantner, Cleveland, sees many chronically ill teenagers. She gives them no medication. Her prescription is to cut out the pot- then the symptoms disappear in 4-12 weeks- (2) (11)

In 1973 Dr. Akira Marisnura of Columbia University examined from neaitny pot smoking young men, the chromosomes of T-lymphocytes, cells important to the immune system. The men had smoked marijuana for an average of 4 years and had not used other drugs. For those smoking 2 joints a wee- about 1/3 of the T-lymphocyte cells had about half the normal number of chromosome (46) for the daily marijuana smoker some cells contained only 5-10 chromosomes (17)

- (5) There is a common perception by youth and others that the current Alaska statutes "legalize" marijuana, and this misperception has a social effect that is detrimental to the public health and welfare in that it encourages drug use.

475, a year following marijuana decriminalization in Oregon, 28% of the people who refrained from smoking pot did so because of possible health dangers. In 1976 only 7% refrained because of possible health

dangers (center for policy research and analysis,) A Study of State Policies and Penalties) (10)

In 1976, 2 years after Oregon decriminalized marijuana the number of those who had ever used the drug jumped by 20% and current use increased by 50% (10)

California decriminalization of marijuana accompanied by a jump of over 71% in the number of youth under 18, and 46% in the number of adults arrested for driving under the influence of a drug over a 6 month period as compared with the same period a year before legalization. (10)

BIBLIOGRAPHY

- 1 Gilkeson, Robert, M.D., Marijuana: Toxic to Cells
Drug Awareness Information Newsletter, Oct. 1987
Committees of Correspondence
- 2 Mann, Peggy, Marijuana Alert, 1985 McGraw-Hill Co
- 3 DuPont, Robert, Jr. M.D., Getting High on Gateway Drugs
American Psychiatric Press, Inc. 1984
- 4 Nanas, Gabriel C, Hearings-subcommittee on Criminal Justice
Committee on the Judiciary, U.S. Senate-96 Congress 1-16-80
- 5 Smithy, Grace; Asch, Ricardo, Marijuana and Reproduction
American Council on Marijuana, 1982
- 6 Jones, Hardin, Sensual Drugs
Cambridge U. Press, 1977
- 7 Tennant, Forest Identifying the Drug User, Veract, 1986
- 8 Correspondence from University of Mississippi Research Institute
- 9 Jones, Helen, On Marijuana Reconsidered.
- 10 Schwartz, Richard, M.D. Marijuana an Overview
- 11 Nanas, Gabriel, Marijuana in Science and Medicine
Raven Press, 1984
- 12 Russell, George Marijuana Today, Hyrin Institute, 1980
- 13 Tennant, Forest, Clinical Toxicology of Cannabis Use
WHO-ARF 1983
- 14 Report on Cannabis-WHO-ARF- 1981
- 15 Position statement on psychoactive substance use and dependence
update marijuana and cocaine-American J Psychiatry- Feb 1987

- 16 Taskin, Donald excerpted in USA Today 2-11-88
From New England Journal of Medicine 2-88
- 17 Blerson, G, Moulton, Otto, Summary of Biological Effects of Marijuana
Drug awareness newsletter, 1-88
- 18 Heath, Robert, M.D. Marijuana and the Brain,
reprint in Committees of Correspondence
- 19 Drug Abuse, Drug Abuse Research
the 2nd triennial report to congress from the Sec Dept of Health and
Human Services NIDA printed 1987
- 20 Tennant, Forest, Post-Drug Impairment Syndrome
Committees of Correspondence 1985
- 21 Marijuana
NIDA Capsules, 8, 1986 NIDA
- 22 "Effect of Marijuana on the Reproductive System"
18-19 American Council of Drug Education
- 23 Putting a Match to the Marijuana Myth
Peggy Mann
- 24 Nanas-Medical Journal of Australia -p. 83-84
vol 145-July 21-86
"Cannabis Toxicological properties and epidemiological Aspects"
- 25 Dr. Carl Smith-Listen Magazine Feb 1983
"Retarding Reproduction"



ALASKA STATE LEGISLATURE
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April 4, 1988

MEMORANDUM

TO: Representatives Johnny Ellis and Niilo Koponen
Co-Chairs, House Health, Education and Social Services Committee

FROM: Karla Hart ~~KH~~
Legislative Analyst

RE: Findings on Marijuana (Senate Bill 32) and Comparison With Alcohol
and Tobacco
Research Request 88.212

As part of the House Health Education and Social Services Committee's preparation for hearings on the recriminalization of marijuana, you asked us to discuss the findings on marijuana included in CSSB 32 (HESS) and, where appropriate, to present similar information on alcohol and tobacco.¹ I have addressed each of the findings included in the bill with the most applicable research available to me.² Under each finding below, research which supports the finding is presented first, followed by

¹"The roles of tetrahydrocannabinol (THC) in marijuana, ethanol in alcoholic beverages, and nicotine in tobacco products are similar in terms of drug abuse or addiction," according to the National Institute of Drug Abuse (NIDA) in: Drug Abuse and Drug Abuse Research, The first in a Series of Triennial Reports to Congress, U.S. Department of Health and Human Services, DHSS (ADM) 85-1372, 1984, p. 97.

²This memorandum incorporates portions of House Research Memorandum 87.167 and presents material in a similar format. In addition to material gathered independently, I have incorporated material provided by Alaskans for a Drug Free Youth and the National Organization for the Reform of Marijuana Laws. Prior to March 16, I asked for access to Senator Fischer's materials on marijuana. Because permission was not granted until the afternoon of March 30, I was unable to examine his files due to the memorandum deadline.

research which disputes the finding or presents additional information which you may wish to consider. Wherever possible, I have presented the research without paraphrasing it.

Section 1. FINDINGS. (a) The legislature finds that marijuana use is a serious health problem for the following reasons, each of which constitutes a legitimate and compelling state interest:

- 1) Marijuana and other cannabis preparations may contain over 420 different compounds.

Support. C.E. Turner found that marijuana "...is quite complex, containing at least 421 individual compounds. Sixty-one of the chemicals which have been identified in the plant--the cannabinoids--are specific to cannabis...."³ "And when marijuana is smoked, the 421 chemicals turn into still more chemicals. Over 2,000 of them."⁴

Other Considerations. According to Jon Gettman, National Director of NORML, "there is no correlation, let alone a causal relationship, between the number of compounds a substance contains and its capacity to pose a serious health hazard. However, it must be pointed out that refined pharmaceuticals tend to be more toxic and hazardous to the body than natural substances--which tend to be more easily metabolized. Coca leaves and opium, for example, are less toxic than their refined by-products, cocaine and heroin. It could be argued that the lower the number of compounds present in a substance the more dangerous it is, but this would be equally as fallacious."⁵

Hundreds of compounds exist in just about everything humans eat. As Marlys Schneider, Chemistry Department, University of Alaska Fairbanks, explained, this complexity is often advantageous because the concentration of any single, and potentially harmful, compound is diluted. She added that the harmfulness of a substance is determined by how much of it is present, not what it is.⁶

³C. E. Turner, "Chemistry and metabolism of marijuana," in: Marijuana Research Findings: 1980, ed. R. C. Peterson, Washington, D.C., U.S. Government Printing Office, 1980.

⁴Peggy Mann, Pot Safari: A Visit to the Top Marijuana Researchers in the U.S., New York, Woodmere Press, 1965, p. 12.

⁵Jon B. Gettman, Director, National Organization for the Reform of Marijuana Laws, personal communication, March 17, 1988.

⁶Marlys Schneider, Chemistry Department, University of Alaska Fairbanks, personal communication, March 18, 1988.

Alcohol. Ethanol is a single chemical.⁷

Tobacco. "Tobacco smoke contains over 1,500 chemical compounds, including heavy metals from the soil in which the tobacco is grown, chemicals added in the processing of tobacco, from bacterial or fungal contamination and products of combustion of the plant material. The principal components of tobacco smoke may be characterized under the headings of volatile compounds (or gases), water-soluble agents and fat-soluble and insoluble particles ("tars")."⁸

- 2) Tetrahydrocannabinol (THC), one of the pharmacologically active compounds in marijuana, is not soluble in water, but goes into the fatty tissues of the brain, testicles, ovaries, and other internal organs and takes as long as 30 days to be eliminated from the body.

Support. According to Dr. W.D.M. Paton, Professor of Pharmacology at Oxford University, "the various cannabinoid substances are highly soluble in fat, but have a low solubility in water."⁹ Other research shows that "THC--the principal psychoactive ingredient of marijuana...tends to accumulate in the brain and gonads and other fatty tissues."¹⁰

Research completed by the National Institute on Drug Abuse (NIDA) shows that THC tends to remain for long periods of time in fatty tissues. Five days after a single injection of THC, 20 percent of the THC remains stored in body fats. Complete elimination of a single dose can take 30 days.¹¹

I did not find any research which disputes this finding.

⁷Mann, Pot Safari, p. 12.

⁸Donald P. Tashkin, and Sidney Cohen, Marijuana Smoking and Its Effects on the Lungs, New York, The American Council on Marijuana and Other Psychoactive Drugs, 1981, p. 8.

⁹George K. Russell, Marijuana Today: A Compilation of Medical Findings for the Layman, rev. ed., New York, The Myrin Institute for Adult Education, 1983, p. 45.

¹⁰Senator Eastland, Chairman of the Internal Security Subcommittee of the United States Senate, May 1974, summarizing testimony given before the Subcommittee. Quoted in Marijuana Today, p. 14.

¹¹Robert C. Petersen, ed., Marijuana Research Findings: 1980, National Institute on Drug Abuse Research Monograph 31, Washington, D.C., U.S. Government Printing Office, DHSS (ADM)80-1001, 1980, p. 57.

Other Considerations. One of the NIDA's four "high priority research questions" in a 1987 publication was that the "significance of the cumulation of cannabinoids in lipid tissues over years requires clarification; for example, does the retention of THC and its congeners in lipid membranes of the gonads and neurons produce undesired changes?"¹²

Alcohol. Alcohol is water soluble and is taken into the blood stream, metabolized and washed out of the body in a few hours.¹³

Tobacco. Nicotine is also water soluble.

- 3) The buildup of THC in the system means that repeated administration of even small doses may lead to an accumulation of the drug higher than levels reached at any time after a single dose.

Note. "Drugs that are slowly cleared are not necessarily inherently more toxic than drugs that are rapidly cleared. However, slow clearance may make for cumulative toxicity (assuming that some of the metabolites have biological activity). Many useful therapeutic drugs are cleared slowly from the body; for example, many benzodiazepines. Therapeutic drugs having this characteristic sometimes cause problems when their dosage schedules are not properly regulated. Thus, slow elimination and the possibility of drug accumulation become even more significant with a drug such as marijuana which is administered in doses and on a dosage schedule controlled by the individual user and by custom rather than as recommended and monitored by a physician."¹⁴

¹²Drug Abuse and Drug Abuse Research, The second triennial report to Congress from the Secretary, U.S. Department of Health and Human Services, Rockville, Md, National Institute on Drug Abuse, DHSS (ADM)87-1486, 1987, p. 88.

¹³Mann, Pot Safari, p. 49.

¹⁴Marijuana Research Findings: 1980, pp. 58-59.

Support. This finding is largely a quote from a National Academy of Sciences Report.¹⁵ In other words, "If a person is using marijuana more often than once a month, ... then residue levels of THC are not only retained, but also build up in the user's body."¹⁶ "There's one other substance which has as much staying power [as THC] in the body cells. DDT. But because it clings on in the body cells [about as long as THC], it was banned."¹⁷

Other Considerations. The psychoactive components in marijuana are metabolized fairly quickly according to Dr. Arthur McBay, North Carolina's chief medical examiner.¹⁸ Jon Gettman, NORML, explains that the "high" associated with marijuana lasts for approximately four hours and repeated doses, therefore, do not have a cumulative psychoactive effect if administered less frequently than every four hours.¹⁹

Alcohol and Tobacco. Because both ethanol and nicotine are largely water soluble they do not "buildup" in the system.

- 4) The buildup of THC in the body causes the user to smoke more marijuana to achieve the desired high and may result in loss of sleep, appetite, and initiative, as well as moodiness and depression.

Note. "Tolerance...is present if one witnesses a diminished response to a particular dose of a drug after one or more prior administrations of this drug. Tolerance can also be said to be present if a larger dose of [a drug] is necessary to produce a particular intensity of physiologic or

¹⁵Institute of Medicine, Marijuana and Health, Washington, D.C., National Academy Press, 1982, p. 20.

¹⁶Robert L. DuPont, Jr., Getting Tough on Gateway Drugs: A Guide for the Family, Washington, D.C., American Psychiatric Press, Inc., 1984, p. 68.

¹⁷Mann, Pot Safari, p. 22.

¹⁸Arthur McBay, as quoted by Jon Lettman, NORML, personal communication, March 25, 1988.

¹⁹Lettman, personal communication, March 25, 1988.

behavioral response in an individual who has previously consumed [the drug] as compared to the dose that was necessary to produce such response in this individual prior to the consumption of the [drug]."²⁰

Support. Studies indicate that a tolerance to THC can develop, and increasing doses of a drug are required to produce the same effect.²¹ "It appears now, both in animals and in humans, that tolerance develops quite rapidly to many of the effects of THC. The more frequent the administration and the higher the dose the more rapidly it develops, but even subjects smoking as little as one marijuana cigarette per day in a laboratory experiment demonstrate tolerance on some behavioral and physiologic dimensions."²² Other research stated that "...lethargy and loss of goal directedness persists during the interval between intoxications with marijuana and is generally reversible after months of abstinence."²³

Other Considerations. I did not find any research which directly disputes this finding. In fact, there is an "amotivational syndrome" which describes personality changes seen in some daily users of marijuana. "The changes include apathy, loss of ambition, loss of effectiveness, diminished ability to carry out long-term plans, difficulty in concentrating, and a decline in school or work performance. Interpretation of the evidence linking marijuana to amotivational syndrome is difficult. Such symptoms have been known to occur in the absence of marijuana. Even if there is an association between this syndrome and use of marijuana, that does not prove that marijuana causes the syndrome. Many troubled individuals seek an 'escape' into use of drugs; thus, frequent use of marijuana may become one more in a series of counterproductive behaviors for these unhappy people."²⁴

²⁰Boris Tabakoff and Jeffrey D. Rothstein, "Biology of Tolerance and Dependence," in Medical and Social Aspects of Alcohol Abuse, edited by Boris Tabakoff, Patricia B. Sutker and Carrie L. Randall, New York, Plenum Press, 1983, pp. 187-188.

²¹Russell, Marijuana Today, pp. 73-74.

²²Marijuana Research Findings: 1980, p. 74.

²³Drug Abuse and Drug Abuse Research, The first in a series of triennial reports to Congress from the Secretary, U.S. Department of Health and Human Services, Rockville, Md, National Institute on Drug Abuse, DHSS (ADM)85-1372, 1984, p. 88.

²⁴Marijuana and Health, pp. 124-125.

Alcohol. A wide range of ethanol tolerances has been proven to develop in humans.²⁵ "Alcohol intoxication has a profound effect on sleep....Sleep disturbances in alcoholics may persist...for up to one or two years after termination of chronic drinking."²⁶ "The consumption of ethanol can produce nutrient imbalance because alcoholic beverages are almost entirely devoid of essential nutrients other than calories and hence are also 'empty' in nutrient value."²⁷

Tobacco. Tolerance to nicotine develops with repeated use. Symptoms of tobacco withdrawal include irritability, anxiety, difficulty concentrating, headaches, gastrointestinal disturbances, insomnia, fatigue, aggressiveness, and impaired performance on such psychomotor and learning tests as simulated driving, vigilance, and pair-associate learning.²⁸

- 5) It is possible for a human being to overdose from the use of marijuana, especially if it is used in conjunction with alcohol, because it increases the effects of alcohol.

Comment. The term overdose is vague--Webster's Dictionary defines overdose as "too great a dose."

Support. Some studies have found that "...behaviors are linked behaviors, so that the consumption of any substance, licit or illicit, is positively correlated with an increased consumption of all other substances."²⁹ "Taking the total of animal and human research, simultaneous use of both alcohol and marijuana typically has more profound effects than the use of either alone. However, the magnitude and duration of the effect may vary depending on the dosages of the two drugs involved, the type of effect measured, and the time intervals involved in administering the drugs. As

²⁵Tabakoff and Rothstein, "Biology of Tolerance And Dependence," in Medical and Social Aspects of Alcohol Abuse, pp. 197-216.

²⁶Ibid., pp. 203-204.

²⁷Ting-Kai Li, "The Absorption, Distribution, and Metabolism of Ethanol and Its Effects on Nutrition and Hepatic Function," in Medical and Social Aspects of Alcohol Abuse, p. 69.

²⁸Drug Abuse and Drug Abuse Research, 1987, p. 97-98.

²⁹R. L. DuPont, testimony before the Senate Subcommittee on Internal Security, May 1975, ref. 90, pp. 461-471. Quoted in Russell, Marijuana Today, p. 16.

with either drug alone, there are also undoubtedly individual differences in response to the drugs in combination."³⁰

Dispute. "No human being is known to have died of an overdose [of marijuana]. By extrapolation from animal experiments, the ratio of lethal to effective (intoxicating) dose is estimated to be on the order of thousands to one."³¹ "Delta-9-THC and related cannabinoids have very low lethal toxicity. ...The lack of well-authenticated cases of human deaths from acute delta-9-THC or cannabis overdose is consistent with the [described] animal data."³² Drawing from research conducted on the relationship between marijuana and alcohol, Dr. Sidney Cohen, of the Neuropsychiatric Institute, University of California at Los Angeles, concluded that "no evidence is at hand to indicate a greater life-threatening aspect to combined use over and above the toxicity of each drug used alone."³³

Dr. Cohen also stated that "there is little evidence that these drugs [marijuana and alcohol] antagonize the psychic effects of each other although one study has found such an effect at certain dosage levels. Nor has any investigation found evidence for a potentiating action (in which the combined effect is greater than the sum of the dosages of the two drugs). The current belief is that, when used together, the drugs are generally additive (the combined effect is the sum of the two doses)."³⁴

Alcohol. "Alcohol in large doses is an anesthetic, in less amounts it behaves as a sedative. As with all sedatives, it appears to stimulate thought and activity shortly after its ingestion. This biphasic effect produces an initial activation of social and verbal behavior associated with some lightening of mood and relaxation of tensions. As intake continues, sedation and a reduced contact with the environment occur, the

³⁰Marijuana Research Findings: 1980, pp. 38 and 170.

³¹"Marijuana," The Harvard Medical School Mental Health Letter, Vol. 4, No. 5, November 1987, p. 2.

³²Marijuana and Health, p. 24.

³³Sidney Conen and Phyllis J. Lessin, Marijuana and Alcohol, Rockville, Md, The American Council for Drug Education, 1982, p. 23.

³⁴Ibid., p. 13.

end stage of which is coma and death."³⁵ "Fortunately for many users of alcohol, before this fatal level of anesthesia is reached, the vomiting center of the brain is activated, and--reinforced by the stomach irritation also produced by overdrinking--causes the user to vomit. The lives of many who overdose on alcohol are thus saved."³⁶

Other Considerations. "Since marijuana suppresses the brain's vomiting center, it is possible that people stoned on marijuana may, when also drinking large amounts of alcohol, not vomit before they pass out. This can cause a raised risk of deaths due to alcohol overdose."³⁷ "However, marijuana appears to be an insufficient deterrent to vomiting when excessive quantities of alcohol are involved."³⁸

Tobacco. I did not find any discussion of nicotine overdoses.

- 6) The THC content of commonly available marijuana has increased from less than one percent 10 years ago to as high as 10 percent today.

Support. The reports and studies reviewed indicate that the THC content in marijuana in the United States has increased during the last twenty years. "The marijuana used today is many times--five to ten times--stronger than in the 60s. At the beginning of the drug movement, marijuana with THC content as low as .02 to .5 percent was commonly available and marijuana with two percent THC was considered 'real good grass.' Now confiscated marijuana analyzed in government laboratories has been found to have THC content as high as 14 percent."³⁹

"'Street' marijuana has increased markedly in potency over the past five years. Confiscated materials in 1975 rarely exceeded one percent THC content. By 1979, samples as high as five percent THC content were common. 'Hash oil,' a marijuana extract unavailable a decade ago, has been found to have a THC content as high as 28 percent, with more typical samples analyzed by University of Mississippi chemists ranging from 15 to 20 percent THC."⁴⁰

³⁵Ibid., pp. 9-10.

³⁶DuPont, Getting Tough, p. 108.

³⁷Ibid., p. 109.

³⁸Gettman, personal communication, March 17, 1988.

³⁹Helen C. Jones, "On Marijuana Reconsidered," Executive Health, Vol. 10, No. 5, February, 1984.

⁴⁰Marijuana Research Findings: 1980, p. 2.

Dispute. In an upcoming article in the Journal of Psychoactive Drugs, Tod Mikuriya, M.D. and Michael Aldrich, Ph.D., "...show that the range of [marijuana] potencies available [in the early 1970s] (marijuana 0.1 to 7.8 percent, averaging 2.0 to 5.0 percent by 1975) was approximately the same as that reported now."⁴¹ "It is not useful to compare average low potencies with the full range of potencies available in reality. Nor is it valid to cite the low end of the range then as a baseline to compare with the high end of the range now."⁴²

Other Considerations. The THC content of a marijuana cigarette will vary greatly depending on the type of marijuana. Thus, the THC content of a marijuana cigarette today could be more or less than 10 percent per cigarette. Dr. Mikuriya notes that "An important consideration in regard to the potency issue is auto-titration, the adjustment of dose by the individual user to obtain maximal effects and avoid unpleasant ones," and he provides observations on the practice of auto-titration.⁴³

Tobacco. "Studies have demonstrated that many smokers who switch to lower 'tar' and nicotine cigarettes will compensate for the loss in smoke nicotine (and possibly other agents) by intensifying their smoke intake, puffing more frequently, and drawing larger volumes per puff."⁴⁴

- 7) Marijuana with THC content higher than one percent is generally available in the state, through both importation and local cultivation.

Support. Sergeant Swanson, Alaska State Troopers, said that according to the U.S. Drug Enforcement Agency, the average THC content in marijuana in

⁴¹Tod Mikuriya and Michael Aldrich, "Cannabis 1988: Old Drug, "New Dangers" -- The Potency Question," to be printed in Journal of Psychoactive Drugs, April 1988, (p. 17 of manuscript).

⁴²Ibid.

⁴³Ibid., pp. 16-17.

⁴⁴The Health Consequences of Smoking: The Changing Cigarette, a report of the Surgeon General, U.S. Department of Health and Human Services, Washington, D.C., U.S. Government Printing Office, DHHS(PHS) 81-50156, 1981, p. 97.

the United States is 1.8 percent. He is not aware of any studies of THC content on marijuana generally available in Alaska; however, he said the majority (estimates 90 percent) of the marijuana in Alaska is imported from source states such as California, Oregon, Washington and Hawaii. Sergeant Swanson added that Alaska marijuana growers appear to be following the nationwide trend of applying cultivation techniques to maximize THC content.⁴⁵

I did not find any research which disputes this finding.

- 8) Marijuana may cause schizophrenia, illusions, and hallucinations, including a dulling of the senses, creating the possibility that the user is unable to respond to body signals, such as pain.

Note. Wayne McCollum, Juneau Mental Health Center, said that the cause of schizophrenia is still unknown--the main theory is the existence of a genetic propensity or susceptibility. Psychosis is a major mental disorder in which the personality is very seriously disorganized and contact with reality is usually impaired. Schizophrenia is a functional psychosis (lack of apparent organic cause). Psychosis may also have organic causes such as brain damage, hypothermia or electrolyte imbalance. Dr. McCollum said there was no relationship between psychosis and an inability to respond to pain.⁴⁶

Support. Some researchers report that "The acute anxiety reaction that may occur during marijuana intoxication can include paranoid delusions,... a full blown acute toxic psychosis with loss of contact with reality, delusions, hallucinations...These acute reactions seem to occur most frequently in individuals who are under stress, depressed, or have a history of schizophrenia."⁴⁷

One researcher described a higher dose-related phase of cannabis intoxication as "...the appearance of delusions, labile emotions, particularly anxiety, decreased impulse control and, at the highest doses, profound

⁴⁵Sergeant Swanson, Alaska State Troopers, Anchorage, personal communication, March 24, 1988.

⁴⁶Wayne McCollum, Juneau Mental Health Center, personal communication, March 29, 1988.

⁴⁷Marijuana Research Findings: 1980, pp. 71-72. See also Marijuana and Health, p. 126.

sensory illusions and hallucinations."⁴⁸ Dr. Harris Isbell, with the University of Kentucky Medical Center, confirmed these findings, stating that "...the data in our experiments definitely indicate that the psychotomimetic (capable of inducing altered states of consciousness) effects of THC are dependent on dosage and that sufficiently high doses can cause psychotic reactions in any individual." Dr. Isbell classified cannabis among the hallucinogens.⁴⁹

One report stated that "...acute psychotic behavior resembling schizophrenic psychosis..." had been reported.⁵⁰ Another report said that "Sufficient clinical information is available to recommend abstinence for schizophrenics in remission, because of the danger of relapse."⁵¹

Another report states that "An acute brain syndrome associated with cannabis intoxication [which includes a] clouding of mental processes...has been reported. It is thought to be dose-related (much more likely at unusually high doses) and to be determined more by the size of the dose than by pre-existing personality." These symptoms have ... "not been frequently reported in the United States, possibly because until recently very strong cannabis materials were less readily available here than in some overseas locations. Acute brain syndrome also diminishes as the toxic effects of the drug wear off."⁵²

Other Considerations. A report by the National Institute on Drug Abuse states that "...it is often difficult to distinguish the role of cannabis from that of pre-existing psychological problems or other environmental precipitants in marijuana-related psychological difficulties. Frequently, heavy marijuana users are also those who have had emotional problems prior to use."⁵³

⁴⁸Marijuana Research Findings: 1980, p. 62.

⁴⁹Russell, Marijuana Today, p. 24.

⁵⁰Robert G. Heath, Marijuana and the Brain, Rockville, Md., The American Council on Marijuana and Other Psychoactive Drugs, 1981, p. 6.

⁵¹Drug Abuse and Drug Abuse Research, 1984, p. 77.

⁵²Marijuana Research Findings: 1980, p. 26.

⁵³Ibid., p. 27.

The American Psychiatric Association notes that "Descriptions of cannabis psychoses vary by culture, and most reports suggest a persistent delirium, which includes bizarre behavior and the potential for violence and panic feelings in the absence of a 'typical' schizophrenia-like psychotic state. There is fairly general agreement that persons suffering from marijuana psychosis do not develop psychotic symptoms characteristic of schizophrenia."⁵⁴

Alcohol. "About 25% of patients undergoing ethanol withdrawal manifest symptoms of sensory disorganization. These patients may suffer from nightmares and from illusions or hallucinations...Hallucinations may occur even while the patient is clear-thinking and oriented...Patients with delirium tremens hallucinations may be difficult to distinguish from those with schizophrenic disorders....Rarely, auditory hallucinations may persist after an individual has recovered from symptoms of alcohol withdrawal and is no longer drinking. This syndrome is known as alcohol hallucinosis, and these patients may go on to develop schizophrenia."⁵⁵

Tobacco. I did not find any related information on tobacco or nicotine.

- 9) Although it may take a heavy cigarette smoker as long as 20 years to develop lung cancer, one marijuana cigarette a day may cause lung cancer in three years.

Note. I did not find any research which directly supports this finding. The following addresses the topic of marijuana as a causative factor in cancer.

Support. "Several lines of evidence strongly suggest that habitual marijuana smoking may be a causative factor in the development of bronchogenic carcinoma [bronchial cancer]. [This] possibility is further supported by the several-fold greater deposition in the lower respiratory tract of tar particulates from the smoke of one marijuana joint compared to that from one tobacco cigarette. However, there is a long lag period between initiation of daily exposure to tobacco tar and the development of frank neoplasia. Moreover, smoking-related pulmonary malignancy will develop in only a small, albeit significant, percentage of smokers. For

⁵⁴American Psychiatric Association, "Position Statement on Psychoactive Substance Abuse and Dependence: Update on Marijuana and Cocaine," American Journal of Psychiatry, Vol. 144, No. 5, May 1987, p. 699.

⁵⁵abakoff and Rothstein, "Biology of Tolerance and Dependence," in Medical and Social Aspects of Alcohol Abuse, pp. 202-203.

this reason it will be difficult to document empirically a link between heavy, habitual marijuana smoking and lung cancer.⁵⁶

"Benzopyrene, a potent carcinogenic agent, is 50 percent more concentrated in the smoke of marijuana than smoke from varieties of high tar Kentucky tobacco."⁵⁷ "According to researchers at the American Health Foundation, marijuana smoke contains 50 percent more cancer-producing hydrocarbons than tobacco smoke."⁵⁸ Further, "...abnormalities suggestive of cancerous lesions have been recorded."⁵⁹

Dispute. A report by the National Institute of Drug Abuse states that "...there is as yet no direct evidence that it [marijuana] can play a causal role in lung cancer."⁶⁰ The Institute of Medicine also reported that "...The finding of known carcinogens in marijuana smoke and the presence of epithelial abnormalities known to be the precursors of lung cancer in heavy smokers of tobacco suggest the possible development of lung cancer in chronic, heavy users of marijuana and/or hashish after a prolonged period of use, especially if they are also smokers of tobacco. However, evidence to support this hypothesis is not available.

Because marijuana smoking is an ancient custom in Asia and the Middle East, lung cancer would be expected to be more prevalent in these parts of the world if a causal relationship did exist. Unfortunately, no reliable data have been gathered to settle this question. Heavy smoking of marijuana, in quantities comparable to that of tobacco, has been relatively uncommon in the United States. Therefore, the contribution of marijuana smoking to the incidence of primary lung cancer cannot yet be answered with any authoritative data."⁶¹

⁵⁶Donald P. Tashkin et al., "How the Lungs are Affected by Marijuana Smoking," The Journal of Respiratory Diseases, November 1987, p. 106.

⁵⁷Russell, Marijuana Today, pp. 54-55.

⁵⁸Jones, "On Marijuana Reconsidered," p. 2.

⁵⁹Marijuana and Health, p. 63.

⁶⁰Marijuana Research Findings: 1980, p. 3.

⁶¹Marijuana and Health, p. 63-64. "The Institute of Medicine was chartered in 1970 by the National Academy of Sciences to enlist distinguished members of the appropriate professions in the examination of policy matters pertaining to the health of the public."

Tobacco. "Research indicates that cigarette smoking causes cancer of the lung, larynx, oral cavity, and esophagus, and is significantly associated with pancreas, urinary bladder, and kidney cancer in both men and women."⁶²

Other Considerations. Dr. Wu and others note that "Long-term adverse pulmonary consequences of tobacco smoking have been shown to be related to dose. For example, the incidence of chronic obstructive pulmonary disease or bronchogenic carcinoma in smokers of fewer than 5 to 10 cigarettes a day is substantially less than in habitual smokers of more than 20 tobacco cigarettes a day. Although regular tobacco smokers consume more than 15 tobacco cigarettes a day, most current smokers of marijuana smoke less than 1 marijuana cigarette a day. Even among the estimated 6 million daily smokers of marijuana in the United States, smoking more than five marijuana cigarettes a day is unusual."⁶³ They found "the net respiratory burden of particulates was approximately four times greater during marijuana smoking than tobacco smoking."⁶⁴ "Accordingly, despite the presence of four times the tar and carbon monoxide of a tobacco cigarette, a single marijuana cigarette consumed daily presents less of a health risk than a quarter of a pack of tobacco cigarettes."⁶⁵ Dr. DuPont notes that "...more than 80 percent of marijuana smokers also smoke tobacco cigarettes...."⁶⁶

Alcohol. "Heavy drinkers have an increased risk of cancer of the mouth, esophagus, stomach, liver, and bladder. This risk is even greater if they also smoke cigarettes, as many heavy drinkers do...the risk of cancers is increased for drinkers, and it is increased for smokers, but for those who are both drinkers and smokers, the extra risk is not merely additive--it

⁶²The Health Consequences of Smoking: The Changing Cigarette, a report of the Surgeon General, U.S. Department of Health and Human Services, Washington, D.C., U.S. Government Printing Office, DHHS(PHS)81-50156, 1981, p. 79.

⁶³Tzu-Chin Wu et al., "Pulmonary Hazards of Smoking Marijuana as Compared with Tobacco," The New England Journal of Medicine, February 11, 1988, p. 349.

⁶⁴Ibid., p. 350.

⁶⁵Gettman, personal communication, March 25, 1988.

⁶⁶Dupont, Getting Tough, p. 69.

appears to be multiplicative. Alcohol also acts as a promoter of cancers in the lungs, the pancreas, the intestines, and the prostate."⁶⁷

- 10) THC affects eggs, sperm, sexual hormones, and the development of a fetus, and marijuana use may result in deformed or undersized offspring.

Effects on the Reproductive System.

Support. Several writers state that "Studies have shown that THC accumulates in the ovaries of the female, where it will kill and injure eggs" and that, in males, a "...significant decrease in sperm concentration and total sperm count occurs."⁶⁸ "This effect is apparently accompanied by a decline in sperm motility and an increase in abnormal sperm forms."⁶⁹

"Studies with laboratory animals clearly show that the crude drug marijuana and THC...inhibit secretion of the pituitary hormones, luteinizing hormone and follicle stimulating hormone, as well as prolactin. These changes in pituitary hormone levels produce decreases in sex steroid hormones and cause disruption of ovulation and spermatogenesis. With chronic drug use, disruption of sex accessory organs (e.g., uterus and vagina in the female; prostate gland and seminal vesicles in the male) has also been observed."⁷⁰

Dispute. "In men, a single dose of THC lowers sperm count and the level of testosterone and other hormones. Tolerances to this effect apparently develop; in the [1980] Costa Rican study, marijuana smokers and controls had the same testosterone levels. Although smokers in that study began using marijuana at an average age of 15, it had not affected their masculine development. There is no evidence that the changes in sperm count and testosterone produced by marijuana affect sexual performance or fertility."⁷¹

⁶⁷Dupont, Getting Tough, pp. 110-111.

⁶⁸Marijuana, Narcotic Information Bulletin, No.1-80, p. 2.

⁶⁹Carol Grace Smith and Ricardo H. Asch, Marijuana and Reproduction, Rockville, Md., The American Council for Drug Education, 1982, pp. 16-17.

⁷⁰Ibid., p. 7.

⁷¹"Marijuana," The Harvard Medical School, p. 4.

Other Considerations. Researchers have found that "...many of the endocrine effects caused by the chronic treatment of animals with THC are reversible or decrease as tolerance to the drug develops. Still, many questions remain regarding the long-term consequences of use, for example, on sperm formation, psychosexual maturation, and sex organ function. Until these and other issues are resolved, marijuana consumption by adolescents or males with marginal fertility poses uncertain reproductive hazards."⁷²

Alcohol. "Hypoandrogenization is commonly seen in chronic alcoholic men. Thus 70% to 80% experience decreased libido and/or impotence. Reproductive failure...is common, with 70% to 80% demonstrating both testicular atrophy and infertility. Histologic studies...demonstrate...⁷³ loss of mature [sperm], many of which have an abnormal morphology."⁷³ "In addition to being hypogonadal, chronic alcoholic men are often grossly hyperestrogenized."⁷⁴ "[Some] signs of chronic alcoholism, unlike the transient impotence experienced with an acute alcoholic bout, persist in the absence of intoxication and are due to alcohol-induced tissue injury...Testosterone concentrations can be shown to fall in normal male volunteers within hours of their ingesting sufficient alcohol to produce hangover."⁷⁵

"In contrast to the male, the alcoholic female is not superfeminized but instead shows severe gonadal failure commonly manifested by oligoamenorrhea, loss of secondary sexual characteristics..., and, in addition, infertility."⁷⁶

Tobacco. "Spermatogenesis, sperm morphology, sperm motility and androgen secretion appear to be altered in men who smoke. [A researcher] has demonstrated decreased sperm density, a cigarette-dose-dependent decrease

⁷²Drug Abuse and Drug Abuse Research, 1987, p. 79.

⁷³David H. Van Thiel, "Effects of Ethanol upon Organ Systems Other than the Central Nervous System," in Medical and Social Aspects of Alcohol Abuse, p. 111.

⁷⁴Ibid, p. 113.

⁷⁵Ibid, p. 111.

⁷⁶Ibid, p. 115.