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to be fundamental, the challenged regulation or legislative act would be stricken, [FN15] whereas otherwise some reason could usually be found to sustain it.

> FN12. See Bates v. Little Rock, 361 U.S. 516, 80 S.Ct. 412, 4 L.Ed.2d 480 (1960); Roe v. Wade, 410 U.S. 113, 93 S.Ct. 705, 35 L.Ed.2d 147 (1973).
>
> FN13. Lynden Transport, Inc. v. State, 532 P.2d 700 (Alaska 1975); Breese v. Smith, 501 P.2d 159 (Alaska 1972).
>
> FN14. Lynden Transport, Inc. v. State, 532 P.2d 700, 706 (Alaska 1975).
>
> FN15. Where a fundamental right has required use of the compelling state interest test, only one law has been found valid by the Supreme Court, Korematsu v. United States, 323 U.S. 214, 65 S.Ct. 193, 89 L.Ed. 194 (1944), but no state law has passed muster. Dunn v. Blumstein, 405 U.S. 330, 363-64, 92 S.Ct. 995, 31 L.Ed.2d 274, 296-97 (1972) (Burger, C. J., dissenting). See 48 N.Y.U.L.Rev. 670 at 702. See also Gilbert v. State, 526 P.2d 1131 (Alaska 1974).

I agree with the majority's departure from that test in areas where we have discretion to depart from standards established by the United States Supreme Court. With reference to laws challenged as invading the Alaskan right of privacy, [FN16] I would apply a single flexible test dependent first upon the importance of the right involved. Based on the nature of that right, a greater or lesser burden would be placed on the state to show the relationship of the intrusion to a legitimate governmental interest. I agree with the majority opinion that interference with rights of privacy within one's home requires a very high level of justification. Similar considerations would apply to certain relationships, without reference to situs, i. e. attorney-client doctor-patient, priest-parishioner, marital relationship, parent-child. In all cases involving a right of privacy, I believe that the relationship of the intrusion to a legitimate governmental interest must be carefully examined. The court should not abandon protection of the right of an individual to decide how to conduct his life because a rational basis may be 'conceived' *516 for the legislation in question. The importance of the governmental interest and the means utilized to accomplish this goal must be balanced against the nature of the particular right of privacy. [FN17]

> FN16. Of course, in any event where Federal Constitutional rights are involved, we must at least apply the minimum standards prescribed scribed by the United States Supreme Court. Baker v. City of Fairbanks, 471 P.2d 386, 401-02 (Alaska 1970).
>
> FN17. 48 N.Y.U.L.Rev. 670 at 705.

Applying this test to the facts in this case, assuming that the defendant was found in possession of marijuana in an automobile, I agree with the majority that a valid reason existed for the prohibition due to the proven effect of marijuana on driving, and the unavailability of practical tests for ascertaining whether one is under the influence of an hallucinogenic when balanced against the rather minor status of the right involved, to possess marijuana in public. Accordingly, I would affirm the order denying the motion to dismiss.

CONNOR, Justice (concurring).

I concur in the majority opinion and the separate concurring opinion of Justice BOOCHEVER, but wish to add some observations.

The decision today properly leaves unanswered the question of how far the right to privacy, in connection with the possession of marijuana, extends outside the home. Such a determination can be made only when we are presented with specific facts against which the individual's claim of privacy can be measured, as opposed to the state's assertion of power to control the possession of marijuana. Under the test we have employed in determining the scope of the right to privacy, it is necessary to balance these conflicting claims and determine whether the state's prohibition bears a direct and substantial relationship to effectuating a legitimate state interest.

The record in the case before us does not contain

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(Cite as: 537 P.2d 494)

facts about that particular circumstances in which appellant possessed marijuana. Accordingly, we must remand the case for further elucidation of the facts.

It is certain that the right to privacy does not vanish when one leaves the home. [FN1] There are certain aspects of personal autonomy which one carries with him even when he ventures out of the home, though the claim to privacy diminishes in proportion to the extent that one's person and one's activities impinge upon other persons. But, in order to trace the contours of the right to privacy, it will be necessary to engage in a critical analysis of the facts of each case which presents itself for decision. Only in this fashion can the right to privacy, outside the home, be determined on a reasoned, coherent basis so as to furnish the courts and the public with reliable rules of action. Much definitional work, therefore, remains to be done in the cases yet to be determined.

> FN1. The right to privacy which received protection in Roe v. Wade, 410 U.S. 113, 93 S.Ct. 705, 35 L.Ed.2d 147 (1973), has nothing to do with the locus of the home and, for the most part, is concerned with matters occurring outside the home.

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LEGAL DEPARTMENT
DRUG LAW
REFORM PROJECT

ACLU
AMERICAN CIVIL LIBERTIES UNION FOUNDATION

April 22, 2005

Dear Madam Chair,

On Thursday, April 21, your office should have received a three-volume set of materials submitted by the ACLU of Alaska pertaining to HB 96. Volume Three of those materials, unfortunately, is missing two of the documents listed in the index for that Volume. Index tabs 12 and 13 were inadvertently omitted from the copy of the materials sent to you. We are therefore enclosing copies of those two documents, as listed below:

12. van den Bree, M., and Pickworth, W., *Risk Factors Predicting Changes in Marijuana Involvement in Teenagers*, 62 Arch Gen Psychiatry (2005).

13. *The Government's Drugs Policy: Is it Working?* Home Affairs Committee, House of Commons, United Kingdom Parliament (2002).

I apologize for any inconvenience caused by this error.

Sincerely,

Allen Hopper
Senior Staff Attorney
ACLU Drug Law Reform Project

ORIGINAL ARTICLE

Risk Factors Predicting Changes in Marijuana Involvement in Teenagers

Marianne B. M. van den Bree, PhD; Wallace B. Pickworth, PhD

Background: Marijuana use during adolescence has various adverse psychological and health outcomes. It is poorly understood whether the same risk factors influence different stages in the development of marijuana involvement.

Objective: To establish which risk factors best explain different stages of marijuana involvement.

Design: Data were collected at 2 points using computer-assisted personal interview (wave 1 and wave 2 were separated by 1 year). Twenty-one well-established risk factors of adolescent substance use/abuse were used to predict 5 stages of marijuana involvement: (1) initiation of experimental use, (2) initiation of regular use, (3) progression to regular use, (4) failure to discontinue experimental use, and (5) failure to discontinue regular use. Data were analyzed using logistic regression analysis.

Participants: Middle school and high school students (N=13718, aged 11-21 years) participating in the National Longitudinal Study of Adolescent Health (Add Health).

Results: Three risk factors (own and peer involvement with substances, delinquency, and school problems) were the strongest predictors of all stages. Their combined presence greatly increased risk of initiation of experimental (odds ratio, 20) and regular (odds ratio, 87) marijuana use over the next year. Personality, family, religious, and pastime factors exerted stage-specific, sex-specific, and age-specific influences.

Conclusions: Assessment of substance, school, and delinquency factors is important in identifying individuals at high risk for continued involvement with marijuana. Prevention and/or intervention efforts should focus on these areas of risk.

Arch Gen Psychiatry. 2005;62:311-319

MARIJUANA IS THE MOST commonly used illicit drug. Approximately 50% of secondary-school students in the United States indicate having used marijuana.[1] It is one of the leading substances reported in arrests, emergency department and treatment admissions, and autopsies.[2] Short-term risks of marijuana use include traffic accidents[3] and unprotected sex.[4] In addition, marijuana use is associated with lack of motivation; greater involvement with and inability to quit other substances; psychiatric problems, including depression, schizophrenia, anxiety, suicide, conduct problems, antisocial behavior, and criminal behavior; and reduced chances of participation and stability in adult roles (eg, not graduating from high school, abortion, unemployment, and divorce).[5-13]

Experimentation with substances usually takes place during adolescence when tolerance is lower and risk of dependence is greater than in adulthood.[14] Although most adolescents use marijuana infrequently, without adverse health consequences, a minority progress to harmful use.[15] A better understanding of the risk factors that put adolescents at increased risk for experimentation with marijuana, progression to regular use, and failure to discontinue use can make important contributions to the evidence-based development of prevention and intervention programs.

Previously published studies have indicated that marijuana involvement is associated with a multitude of risk factors, including psychological, family, peer, and school variables.[16] However, most risk factor studies conducted to date have focused on a single aspect of the development of marijuana involvement, usually lifetime use or initiation of experimentation.[16] It is poorly understood to what extent well-established risk factors are associated with different stages of marijuana involvement.[17] The primary aim of our study was to establish and compare the contributions of risk factors to the stages

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Table 1. Marijuana Use Development From Wave 1 to Wave 2[a]

Wave 1		Wave 2			
		Experimental Use		Regular Use	
		No	Yes	No	Yes
Experimental use					
No	10 331 (83)	390 (68), group A	931 (10), group B		260 (3), group C
Yes	2123 (17)	955 (45), group D	786 (37), group E		382 (18), group F
Regular use					
No	12 454 (91)			11 812 (95)	642 (5)
Yes	1264 (9)			640 (47), group G	664 (53), group H

[a]Values are expressed as number (percentage) of subjects. Experimental user, 1-10 times; regular user, >10 times. Five stages were assessed based on comparisons of groups who changed their marijuana use since wave 1 vs those who did not. Stages were initiation of experimental marijuana use (compared groups A and B), initiation of regular marijuana use (compared groups A and C), progression to regular use (compared groups E and F), failure to discontinue experimental use (compared groups E and D), and failure to discontinue regular use (compared groups H and G).

of initiation, progression, and failure to discontinue experimental and regular marijuana use. Most previous studies have focused on 1 or a few risk factors. Our second aim was to evaluate a wide range of relevant risk factors to provide well-funded evidence for their relative importance in predicting development of marijuana involvement. Third, most previous studies have been cross-sectional in nature. Our study uses a longitudinal design, enabling us to predict developments in marijuana involvement based on risk factors assessed in the previous year.

METHODS

The National Longitudinal Study of Adolescent Health (Add Health) was established to determine the causes of health-related behaviors of adolescents and their outcomes in young adulthood. The primary sampling frame included all high schools in the United States with an 11th grade and at least 30 enrollees. From this, a systematic random sample of high schools was selected. Overall, 79% of schools contacted agreed to participate (final sample of 134 schools). Among students, a random sample was selected to take part in in-home interviews. Sixteen thousand seven hundred six subjects were selected to be interviewed at 2 points, wave 1 in 1995 (response rate, 78.9%) and wave 2 in 1996 (response rate, 88.2%). Estimates in this sample were not significantly biased by missing data from dropouts and graduates.[18] The Add Health study and sampling procedures are described in detail elsewhere.[19] For the present study (N=13718), we excluded any nonrandomly selected subsamples, duplicates, and students with missing data on marijuana use. Subjects were aged 11 to 21 years, with a mean (SD) age of 15.4 (1.6) years.

Data were gathered by computer-assisted interview, which yields higher reported prevalences of high-risk behaviors than regular interviews.[20] Interviews took 1 to 2 hours and were administered in the presence of trained assistants. Subjects responded to questions by typing in answers on a laptop computer. Sensitive questions, including those on marijuana involvement, were given on headphones. This avoided the problem of underreporting, which may occur in situations where subjects are face to face with the interviewer.[20] At wave 1, adolescents indicated how many times they had used marijuana during their lives; 1 year later, during wave 2, they reported on their use since wave 1. For both waves, we established the following groups: nonusers, experimental users (used 1-10 times), and regular users (used >10 times). We subsequently assessed changes in marijuana involvement between the 2 waves according to 5 stages: (1) initiation of experimental use (we selected nonusers at wave 1 and compared those who started experimental use at wave 2 with those who had remained nonusers), (2) initiation of regular use (we selected nonusers at wave 1 and compared those who started regular use at wave 2 with those who had remained nonusers), (3) progression to regular use (we selected experimental users at wave 1 and compared those who progressed to regular use at wave 2 with those who had remained experimental users), (4) failure to discontinue experimental use (we selected experimental users at wave 1 and compared those who had discontinued experimental use at wave 2 with those who had remained experimental users), and (5) failure to discontinue regular use (we selected regular users at wave 1 and compared those who had discontinued regular use at wave 2 with those who had remained regular users) (**Table 1**).

Risk factors were established at wave 1 and were used to predict these 5 stages of marijuana involvement. To establish these risk factors, 8 major risk factor domains were first established a priori from the literature, and variables (total of 238) were selected from the Add Health data set to best represent these domains. Next, factor analysis was used to identify within each domain the presence of subdomains (21 identified altogether). Factor solutions were rotated orthogonally (Varimax rotation) to make individual risk factors within each domain independent from each other. For each subject, for each risk factor, summed risk factor scores were obtained by adding those items with relatively high loadings on a factor (≥0.30) and discarding items with lower factor scores. The great majority of the sample had no missing responses for all items making up each risk factor (ie, ≥95% of the sample had 0 missing values for 18 of the 21 risk factors). Individuals with 10% or more of the responses to a summed score missing were excluded from further analyses. For those with fewer than 10% missing values, an imputation formula was used, based on replacing the missing items by the mean of the nonmissing responses. Prior to further analysis, the scored risk factors were normalized using the Blom transformation.[21] The correlation coefficients between the factors as obtained by factor analysis and normalized summed risk factors were equal to or exceeded 0.90 for 18 of 21 subdomains, illustrating the legitimacy of the procedures used to obtain summed risk factors (ie, excluding items with factor scores >0.30, imputation of missing values, and normalization of the summed scores). We conducted 2 sets of logistic regression analyses. First, in analyses including 1 risk factor at a time, we evaluated their association with each of the stages

of marijuana involvement. Subsequently, we performed stepwise logistic regression analyses to select the subset of risk factors best predicting the 5 stages of marijuana involvement. Included as independent variables were all risk factors that were significant in the first set of analyses. For all regression analyses, a conservative significance level of $P \leq .03$ for factors to enter and remain in the model was specified a priori. The influences of age,[7] race,[22] urbanicity,[23] and socioeconomic status[24] (parental educational and occupational status) on the relations between the risk factors and marijuana involvement were taken into account in all analyses. These variables were force-entered into each model before the introduction of the risk factors. Therefore, the associations between the stages of marijuana involvement and the risk factors were corrected for the influences of these 5 variables. Socioeconomic status was assessed by 2 variables: parental level of education and occupation. In the case of a single residential parent, these were the only 2 indicators of socioeconomic status used. In the case of 2 residential parents, the mean level of education and of occupational level was used in regression analyses. Since sex differences have been established in substance use,[25,26] we performed regression analyses including sex as a covariate and, if significant, the analysis was repeated for males and females separately. Data were missing for 29% of the subjects on the items assessing the relationship and activities undertaken with the father. Therefore, regression analyses were run twice, first, including these 2 factors and establishing their significance on the marijuana variables, and next, on having established that these influences were not significant, the regression analyses were repeated excluding these 2 variables, allowing us to include more subjects in the analyses. The results of the latter analyses are presented. The significance of mean differences between groups was assessed by *t* test (level of $P \leq .05$ used). All analyses were performed using SAS (SAS Institute Inc, Cary, NC).[27]

RESULTS

The majority of adolescents had not tried marijuana, and among those who had, experimental use was more common than regular use. However, most adolescents who had used marijuana at wave 1 continued to do so 1 year later (Table 1).

All risk factor information was gathered at wave 1, allowing us to establish the influences on the development of marijuana involvement over the next year. Boys had significantly higher mean scores on most risk factors, except somatic symptoms, depressive symptoms, self-doubt, irrational decision making, activities with mother, and religious involvement, for which girls scored higher (**Table 2**). There were no significant sex differences for activities with father and extent to which the parents allow the adolescent to make independent decisions.

Most risk factors contributed significantly to at least some of the stages of marijuana involvement (**Table 3**). However, 3 risk factors were stronger predictors than others and influenced all stages of marijuana development: own and peer involvement with substances; delinquency; and school-related problems. Other risk factors had smaller effects and tended to be stage and/or sex specific. Considerably more risk factors significantly influenced initiation of experimental and regular marijuana use than progression to regular use or failure to discontinue experimental and regular use.

Stepwise regression analyses were performed to establish the set of variables best predicting each stage of marijuana involvement. The results (**Table 4**) further confirmed the importance and global influence of these 3 risk factors. "Own and peer involvement with substances" predicted initiation of experimental marijuana use (odds ratio [OR], 1.79 for boys and 2.94 for girls), initiation of regular use (OR, 2.72 for boys and girls combined), failure to discontinue experimental use (OR, 0.65 for girls), and failure to discontinue regular marijuana use (OR, 0.62 for boys and girls combined). Delinquency predicted initiation of experimental marijuana use (OR, 1.30 for boys and 1.34 for girls), initiation of regular use (OR, 1.36 for boys and girls combined), progression to regular use (OR, 1.35 for boys), failure to discontinue experimental use (OR, 0.71 for boys), and failure to discontinue regular use (OR, 0.77 for boys and girls combined). School variables predicted initiation of experimental marijuana use (OR, 1.17 for boys and 1.21 for girls), initiation of regular use (OR, 1.57 for boys and girls combined), and progression to regular use for girls (OR, 1.60). Other risk factors exerted stage-specific and sex-specific influences: low religiosity predicted initiation of experimental marijuana use in girls (OR, 0.78) and initiation of regular use in boys and girls combined (OR, 0.83); independent decision making predicted progression to regular use in boys (OR, 1.30), and activities with the mother predicted failure to discontinue regular marijuana use for boys and girls combined (OR, 1.17).

We divided the sample into age groups 11 to 15 years (n=7334) and 16 to 21 years (n=6999) and conducted age-specific analyses for the 3 stages of marijuana involvement in Table 3 for which significant age differences were found. For initiation of experimental use in girls, 4 risk factors were significant for the younger age group (own and peer involvement with substances, OR, 3.12 [95% confidence interval (CI), 2.50-3.90]; delinquency, OR, 1.39 [95% CI, 1.15-1.67]; unhappy in school, OR, 1.25 [95% CI, 1.08-1.44]; and religion, OR, 0.76 [95% CI, 0.66-0.87]), while only own and peer involvement with substances (OR, 3.12 [95% CI, 2.42-4.02]) and religion (OR, 0.81 [95% CI, 0.68-0.97]) were significant in the older group. For initiation of regular use for boys and girls combined, own and peer involvement with substances and trouble in school were significant in both the younger (OR, 2.94 [95% CI, 2.11-4.09] and OR, 1.61 [95% CI, 1.20-2.16], respectively) and older age groups (OR, 2.87 [95% CI, 2.10-3.94] and OR, 1.63 [95% CI, 1.20-2.23], respectively). In addition, delinquency (OR, 1.42 [95% CI, 1.06-1.89]) and irrational decision making (OR, 1.36 [95% CI, 1.08-1.71]) were significant in the younger age group, while inactive pastimes was significant for the older age group (OR, 1.35 [95% CI, 1.05-1.75]). Finally, failure to discontinue experimental use for girls was explained by religion only in the younger age group (OR, 1.34 [95% CI, 1.05-1.72]) and own and peer involvement with substances only in the older age group (OR, 0.54 [95% CI, 0.36-0.82]).

To further establish the influences of the 3 strongest risk factors on marijuana involvement (combining the factors "trouble in school" and "happy in school"), we divided the sample in a high-risk group who scored in the upper 33% for each of the 3 risk factors (n=1386) and a low-risk group who scored in the lower 33%

Table 2. Means, Standard Deviations, and *P* Values Associated With *t* Tests for Sex Differences for the Risk Factors*

Domain	Boys, Mean (SD)	Girls, Mean (SD)	*P* Value
Daily activities†			
Active pastime	6.92 (2.90)	5.91 (2.77)	<.001
Passive pastime	6.81 (2.76)	6.34 (2.69)	<.001
Psychological health‡			
Somatic symptoms	14.67 (7.59)	17.23 (8.92)	<.001
Positive emotions	8.15 (2.63)	7.84 (2.75)	<.001
Depressive symptoms	6.41 (6.30)	7.97 (6.30)	<.001
Personality§			
Self-doubt	21.99 (5.80)	24.14 (6.37)	<.001
Irrational decision making	10.86 (2.86)	10.95 (2.91)	.047
Problem avoidance	11.44 (2.58)	10.98 (2.46)	<.001
School situation‖			
Dissatisfaction with school	21.38 (6.48)	20.82 (6.52)	<.001
Trouble in school	10.91 (5.15)	9.20 (4.62)	<.001
Family functioning¶			
Relations with mother	31.47 (3.80)	30.82 (4.69)	<.001
Activities with mother	3.84 (1.70)	4.44 (1.71)	<.001
Relations with father	22.34 (3.53)	21.59 (4.12)	<.001
Activities with father	12.19 (2.67)	12.14 (2.62)	.28
Family relations	24.91 (4.53)	24.47 (4.92)	<.001
Independent decision making	5.02 (1.61)	5.04 (1.54)	.43
"Rough living"#			
Substance involvement, substance involvement of peers	8.65 (10.11)	7.75 (8.91)	<.001
Violence	2.04 (2.93)	0.91 (1.81)	<.001
Delinquency	3.85 (4.77)	3.03 (3.71)	<.001
Religion**	13.60 (4.85)	14.39 (4.74)	<.001
Neighborhood††	13.69 (2.40)	13.50 (2.56)	<.001

*Analyses are based on the full sample regardless of the status of marijuana use. To facilitate interpretation, the means are given for the nonnormalized risk factors. However, the *t* tests are based on the normalized risk factors. In the case of unequal variances for the 2 groups, *t* tests are based on the Satterthwaite method.[27]

†Active pastimes include active sports, exercise, hobbies, rollerblading, cycling, working around the house, and chores. Passive pastimes include hours watching television and videos, playing video and computer games, and listening to the radio.

‡Somatic symptoms include feeling tired, weak, moody, and/or dizzy; having trouble relaxing; frequent crying; insomnia; waking up tired; feeling very sick; feeling hot; frequent stomachaches; feeling fearful; poor appetite; chest pains; headaches; aches and/or pains; cold sweats; painful urination; too sick for social activities; sore throat and/or cough; acne; and being too sick for school. Positive emotions include feeling hopeful about the future, enjoying life, and feeling happy and just as good as others. Depressive symptoms include feeling depressed, sad, the blues, lonely, bothered by things, people dislike you, life is a failure, fearful, too tired to do things, it's hard to get going, life is not worth living, people are unfriendly to you, poor appetite, and talking less than usual.

§Self-doubt includes not feeling proud of self, not liking self, having no good qualities, feeling unloved and unwanted, not fitting in, having low energy, having poor coordination, if sick, not recovering quickly, and often sick. Irrational decision making includes not seeing many approaches to problems, not researching solutions, irrational decision making, not evaluating outcome of decision, and not believing in accomplishment through hard work. Problem avoidance includes never arguing with anyone, never criticizing others, never feeling sad, avoiding confronting problems, and relying on gut feelings.

‖Dissatisfaction with school includes being happy at school, part of school, and close to people at school; feeling teachers treat students fairly, safe in school, students prejudiced, and teachers care about me; and having no trouble with homework. Trouble in school includes having trouble with teachers, having trouble paying attention, frequently skipping school, being suspended, repeating a grade, having trouble with homework, being expelled, not wanting to attend college, having a low grade point average, and being unlikely to attend college.

¶Relations with mother includes having a good relationship with mother, good communication with mother, mother is warm and loving, discusses ethics with mother, mother encourages independence, having few arguments about behavior, feeling mother cares, and being close to mother. Activities with mother includes talking about grades, school issues, personal problems, and life; working on school projects; going shopping, to the movies, concerts, plays, or sporting events; and doing things. Relations with father includes a good relationship with father, good communication with father, father is warm and loving, feeling father cares, and being close to father. Activities with father includes talking about grades and school issues; working on school projects; talking about life; having few arguments about behavior; discussing personal problems; father would be disappointed if didn't graduate from college; going to the movies, concerts, plays, or sporting events; father disappointed if didn't graduate from high school; and doing things. Family relations includes family paying attention to you, having fun together, understanding you, caring about you, and not wanting you to leave home. Independent decision making includes making own choices on television amount and television programs, clothing, diet, weekday bedtime, friends, and weekend curfew.

#Substance involvement, substance involvement of peers includes frequent alcohol consumption, drunkenness, 5 or more drinks on a single occasion, alcohol use outside family, being hung over, throwing up after drinking, best friends drink alcohol, alcohol use more than 2 to 3 times, regretting actions because of alcohol, best friends smoke marijuana, regular cigarette smoking, best friends smoke cigarettes, regretting sex because of alcohol, having parental trouble because of alcohol, having dating problems because of alcohol, ever smoking cigarettes, driving while drunk, having problems with friends because of alcohol, being drunk at school, getting into physical fights because of alcohol, having first sex at an early age, having school problems because of alcohol, and spending nights away from home without permission. Violence includes pulling a knife or gun on someone, having a knife or gun pulled on you, being shot, stabbing someone, using a weapon in a fight, seeing a shooting or stabbing, being jumped or stabbed, carrying a weapon to school, getting into physical fights, and being seriously injured from a fight. Delinquency includes shoplifting, stealing worth more than $50, causing property damage, painting graffiti, burglary, selling drugs, being loud or rowdy in public, lying to parents about whereabouts, joyriding, and running away from home.

**Religion includes attending religious services, religion is important to you, prayer, participating in youth groups, and believing scriptures are the word of God.

††Neighborhood includes neighbors looking out for others, being unhappy to move, knowing most neighbors, stopping and talking to neighbors, feeling safe in neighborhood, and being happy in neighborhood.

Table 3. Associations of the Risk Factors With Marijuana Involvement*

Risk Factor	Initiation of Experimental Use		Initiation of Regular Use		Progression to Regular Use		Failure to Discontinue Experimental Use		Failure to Discontinue Regular Use	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Active pastimes										
Inactive pastimes	1.16	0.84								
Somatic symptoms	1.15	1.28†		1.48						
Positive emotions		0.80		0.79						
Depressive symptoms	1.18	1.33		1.44						
Self-doubt		1.20		1.44						
Irrational decision making		1.11	1.24	1.46		1.34			0.82	
Problem avoidance					0.79					
Dissatisfaction with school	1.34	1.62†	1.58†	2.03†					0.78	
Trouble in school	1.51†	1.83†	2.16†	2.32†		1.60†			0.78	
Relations with mother	0.86	0.80		0.73						
Activities with mother										1.40
Relations with father	0.79	0.74		0.57†						
Activities with father										
Family relations	0.78	0.69	0.68	0.66†						
Independent decision making		1.20	1.30		1.29					
Substance involvement	2.15†	3.77†	2.83†	6.98†	1.51†	1.49	0.76	0.64†	0.54†	0.64†
Violence	1.49	1.55†	1.68†	2.10†						
Delinquency	1.71†	2.21†	1.77†	3.54†	1.32		0.72	0.80	0.68	0.75
Religion	0.83	0.70	0.76	0.73				1.20		
Neighborhood										

*Values are expressed as odds ratios. Analyses are based on normalized, summed risk factor scores. Significant odds ratios were obtained from regression analyses run for each of the individual risk factors separately. Covariates age, race, urban status, and parental educational and occupational status were force-entered into each model before the introduction of the risk factors. A significance level of $P \leq .03$ for factors to enter and remain in the model was specified a priori. See Table 2 for explanation of risk factors.

†Odds ratios of highest value (≤0.67 or ≥1.50).

(n=1696), while excluding the middle 33%, and repeated the regression analyses. In the high-risk group, 28% of adolescents initiated marijuana use in the next year compared with 2% in the low-risk group (OR, 19.90 [95% CI, 12.02-32.95]). Regular marijuana use was initiated by 16% in the high-risk group compared with 0.3% in the low-risk group (OR, 78.40 [95% CI, 26.40-232.85]). In the low-risk group, no individual progressed to regular use (39% in high-risk group) or continued using marijuana experimentally or regularly (52% and 60% in high-risk group, respectively), so no ORs could be calculated for these 3 stages.

COMMENT

In this large population-based sample, 13% of nonusers at wave 1 had become involved with marijuana 1 year later (at wave 2, 10% experimentally and 3% regularly). More than half (55%) of adolescents who had experimented with marijuana at wave 1 continued to use marijuana either experimentally (37%) or regularly (18%). The great majority of regular users at wave 1 remained involved with marijuana (53% on a regular basis and 20% experimentally). These numbers indicate that initiation tends to result in continuation.

The risk factors that have been most consistently related to marijuana use in the literature include the following: (1) Daily activities. Low levels of engagement in prosocial activities are associated with marijuana use[28,29]; (2) Psychological health. Marijuana use is associated with intrapersonal difficulty,[30] poor control of emotions,[30] and depression and anxiety[31,32]; (3) Personality. Risk of marijuana use may be increased in those with limited inner resources to cope with psychological stress[33] and poor self-concept.[34-36] Other personality traits associated with increased risk include deviance,[37] rebelliousness,[25] being unempathetic,[38] and unconventionality[30,38]; (4) School situation. School-related risk factors include poor academic performance,[39-43] low connectedness to school,[44] truancy, and school dropout[45-47]; (5) Family functioning. Risk factors within the family environment include poor, inconsistent family management practices; family conflict; low bonding[48,49]; poor parental monitoring; and lack of structure and rules[25,42,50]; (6) Rough living. Risk of marijuana use is increased in those with greater use of other substances[6,51] and substance-using friends.[24,51-53] Marijuana use has also been associated with a maladaptive conflict style,[54,55] aggression,[56] delinquency,[6,7,57] violence,[23,58] and precocious and risky sexual behavior[59,60]; (7) Religiosity and conservative beliefs may protect against adolescent substance use[61]; and (8) Risk of substance use may be greater in disadvantaged neighborhoods.[62,63]

Our analyses indicated that, when analyzed individually, most of these risk factors predicted at least some stages of marijuana involvement. However, the strongest predictors were substance use by adolescents themselves and their peers; delinquency; and school-related problems. These factors also influenced most stages of marijuana involvement, suggesting that intervention efforts aimed at these risk factors may be broadly applicable. In addition, when

Table 4. Stepwise Logistic Regression Analysis on the Development of Marijuana Use Between Waves 1 and 2*

Significant Factor	Boys	Girls
	OR (95% CI)	
Initiation of Experimental Marijuana Use†		
Substance involvement, substance involvement of peers	0.79 (0.59-2.10)	2.94 (2.48-3.49)
Delinquency	1.30 (1.17-1.54)	1.34 (1.16-1.55)
Trouble in school	1.17 (1.02-1.35)	
Unhappy in school		1.24 (1.08-1.36)
Religion		0.78 (0.70-0.87)
	R, E*	A*
Initiation of Regular Marijuana Use†		
Substance involvement, substance involvement of peers	2.72 (2.21-3.34)	2.72 (2.21-3.34)
Trouble in school	1.57 (1.31-1.88)	1.57 (1.31-1.88)
Delinquency	1.36 (1.13-1.64)	1.36 (1.13-1.64)
Religion	0.83 (0.71-0.97)	0.83 (0.71-0.97)
	A, E*	A, E*
Progression to Regular Marijuana Use		
Delinquency	1.35 (1.09-1.68)	
Independent decision making	1.30 (1.05-1.60)	
Trouble in school		1.60 (1.28-2.01)
	R*	
Failure to Discontinue Experimental Marijuana Use		
Delinquency	0.71 (0.61-0.84)	
Substance involvement, substance involvement of peers		0.65 (0.50-0.84)
		A*
Failure to Discontinue Regular Marijuana Use†		
Substance involvement, substance involvement of peers	0.62 (0.50-0.77)	0.62 (0.50-0.77)
Delinquency	0.77 (0.66-0.90)	0.77 (0.66-0.90)
Activities with mother	1.17 (1.02-1.34)	1.17 (1.02-1.34)
	E, O*	E, O*

Abbreviations: A, age of the subject at wave 1; CI, confidence interval; E, parental education; O, parental occupation; OR, odds ratio; R, race; U, urban status.

*Analyses based on normalized, summed risk factor scores. In all regression analyses, the following factors were specified to be entered into the model: the age of the subject at wave 1 (A), race (R), urban status (U), parental education (E), and parental occupation (O). In case any of these factors were significant, their abbreviation is included in the table. The χ^2 test for the combined effect of the independent variables is based on the −2 log likelihood method. A significance level of $P=.03$ was specified for the χ^2 score for entering a factor in the model and for the factor to remain in the model.

†Sex differences were nonsignificant; therefore, boys and girls were combined in analyses on this variable.

we performed analyses on the younger (11-15 years) and older (16-21 years) age groups separately, these risk factors remained the strongest predictors.

Our results confirm previous reports of the importance of the risk factors "substance use by self and peers"[6,15,51,53,64] and "delinquency."[6,7,65] Use of alcohol or drugs during adolescence increases the risk of substance dependence in adulthood.[8] Marijuana use has been related to failure to quit other substances.[11] Peers may influence adolescent substance use by changing personal attitudes, serving as role models, and being a source of information and providing access, encouragement, and a social setting for experimentation with substances.[64,66-68] Deviant peer affiliations pose a risk to retention rates during substance abuse treatment and may need to be dealt with specifically during treatment.[69] The combination of the risk factors "substance abuse" and "delinquency" may lead to a career of crime.[16] High rates of substance use, involvement with delinquent activities, and being part of deviant peer groups seem to reflect low concern with the future or perceived future perspectives. Indeed, illicit drug use is associated with reduced chances of successful participation in adult roles.[12]

School-related variables presented the third strong risk factor. Poor academic achievement[39,41,42,45,47] has been previously associated with marijuana involvement. The present study used a broader assessment of the school situation. Risk factor "trouble in school" included, in addition to an indicator of test results (grade point average), information on problems with teachers, trouble paying attention, frequently skipping school, suspension, repeating a grade, expulsion, and no desire or intention to attend college. "Dissatisfaction with school" assessed being happy in school, part of school, safe in school, close to people in school, whether teachers care about students and treat them fairly, and whether other students are prejudiced. The few previous studies that have used similar broader evaluations of the school environment have also found that the broader school context is an important risk factor in marijuana involvement.[36,44] Interestingly, one of these studies found that school bonding is closely related to self-efficacy.[36] Our findings are not limited to marijuana use; we have previously found that school-related problems predict experimentation with cigarettes and progression to regular smoking.[70] It has been previously reported that remedial academic classes can improve not only school performance but also reduce smoking rates.[71]

Adolescents spend a major part of their lives in school. Certain school characteristics (eg, high turnover of staff and pupils, pupil-staff ratio, absenteeism, and indices of low socioeconomic status in pupils) have been associated with childhood disorder and deviance[72] and may also increase risk of marijuana involvement. Schools can play a role in shaping the development of socially approved conduct,[73] and active discouragement of substance use in schools can be effective.[74] Positive results achieved with classroom-based programs aimed at increasing academic and social competence as well as school-bonding[75] become particularly relevant in the light of the present results.

Other significant predictors in our study exerted stage-specific, sex-specific, and age-specific influences. Religion reduced risk of initiation of experimental marijuana use for girls (both age cohorts), initiation of regular use for boys and girls combined (but not in age-specific analyses), and continuation of experimental marijuana use in younger girls. It has previously been reported that religiosity and conservative beliefs are protective factors for adolescent substance use.[45,70] Possibly, the protective effects of religiosity may exert themselves through the family environment[76] or by enhancing ability to cope with stress.[76]

Family-related variables have been previously reported to be important in the development of adolescent substance use involvement. We found that 2 family-

related risk factors influenced marijuana involvement; independent decision making (eg, freedom in choosing what to wear, eat, when to go to bed, television time and programs) predicted progression to regular use for boys, and activities with the mother (eg, discussing school grades and personal problems) predicted discontinuation of regular marijuana use for boys and girls combined. Both parental monitoring and parent-child attachment have been previously related to adolescent substance involvement.[77,78] In our study, these influences were found to exert stage-specific and sex-specific influences. Possibly, family-related factors become less influential once the impact of other mediating factors (for example, socioeconomic status) and peer influences have been statistically accounted for, as in the analysis used in this study.

Two other factors were only significant in age-specific analyses: irrational decision making predicted initiation of regular marijuana use for boys and girls combined and inactive pastimes predicted the same variable for the older age cohort. Irrational decision making is characterized by the inability to make rational decisions, to research solutions, to evaluate outcomes of decisions, and to believe things can be accomplished through hard work. It reflects a lack of responsibility and self-efficacy, personality traits that have been previously related to marijuana involvement.[79] Inactive pastimes (hours spent watching television, playing computer and video games, listening to the radio) have also been related to risk of substance use.[28,29]

Most risk factor studies have focused on the initiation of marijuana use. The few studies that have also focused on discontinuation of use have indicated that use of other licit and illicit drugs, deviance, selection of social settings favorable for use, increased risk of victimization, and self-medicating to improve mood are important risk factors.[80-82] These findings are in agreement with our results. In addition, we found the progression and failure to discontinue (ie, of experimental and regular use) stages were influenced by considerably fewer risk factors than the initiation stages, and the 3 risk factors with the strongest associations with marijuana use were also the strongest predictors of failure to discontinue.

Adolescents with the highest scores on all 3 risk factors had considerably increased risks of initiating experimental (20 times) and regular marijuana use (87 times). When selecting the highest and lowest scoring groups for each risk factor individually, rather than combined, ORs ranged between 1.6 and 4.0, strongly indicating that the presence of multiple risk factors makes adolescents especially vulnerable for marijuana use and abuse. Therefore, directing intensive prevention and intervention efforts at those groups at greatest risk may be more successful than programs aimed at all students in a school, many of whom will never consider trying marijuana. The percentages of adolescents who were increasingly involved with marijuana were in the high-risk group more frequently than the low-risk group (28% vs 2% for experimental initiation; 16% vs 0.3% for regular initiation; 39% vs 0% for progression; 52% vs 0% for continued experimental use; and 60% vs 0% for continued regular use). This indicates that successful prevention and/or intervention efforts based on these combined risk factors may have an effect on a large proportion of adolescents at risk.

Identification of individuals at risk should take place in any setting where the 3 most important risk factors can be assessed, for example, in schools, medical practices, the judicial system, and substance treatment centers. Prevention and intervention should incorporate strategies to address other substance use and the peer group, delinquent activities, and the school situation. In addition, our finding of fewer risk factors influencing the progression and failure to discontinue use stages suggests that the greatest opportunities for intervention are during earlier stages of marijuana involvement. During later stages, genetic and other biological factors involved in habituation and dependence may become increasingly important[83] and treatment, more difficult.

Although we evaluated many carefully selected risk factors, not all relevant aspects of risk were assessed (for example, genetic factors[26,83] or attitudes toward drug use[84]). Despite the advantages of a longitudinal design, we cannot rule out the possibility that other factors at wave 1 influenced both risk factors as well as marijuana involvement. In addition, the analytical methods used cannot account for complex interactions between risk factors. Sample sizes were lower for analyses of the progression and failure to discontinue use stages. This could have influenced our finding of fewer significant risk factors and should be taken into account when evaluating our conclusions. Many comparisons between behaviors and marijuana involvement were made in this study, and it is therefore possible that significant findings have arisen owing to chance. Reassuringly, however, all associations were in the expected directions and agree with results obtained in previous studies. In addition, a conservative approach was adopted by presenting the results in terms of the strongest findings (P values of $\leq .03$ for the regression analyses). Additional research, also including clinical populations, is needed to confirm the results and to further enhance their practical implications.

Our study indicates that the assessment of licit substance use, information on peers, delinquency, and how adolescents experience their school environment strongly predict risk of involvement with marijuana. Therefore, these risk factors can be used to identify adolescents who may require early and intensive prevention efforts and to address these factors in efforts to help them.

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145 Q. 488. Back

146 Rosemary Jenkins, Department of Health, Q. 46. Back

147 Q 613. Back

148 *Drug Misuse declared in 2000*, pp. 74-81. Back

149 Numbers were calculated as between 162,544 and 243,820 in a recent study, *A comparison of different methods for estimating the prevalence of systematic drug misuse in Great Britain*, M Frischer, M Hickman, F Mariani, L Kraus and L Wiessing (2001), *Addiction* 96 1465-1476, quoted in *Official Report*, 21 November 2001, 353W. Back

150 *Drugs and the Law*, p. 21. Back

THE GOVERNMENT'S DRUGS POLICY: IS IT WORKING?

Harm to users

151. Heroin is highly addictive and its illegality means that the addiction is difficult to satisfy safely. Numerous medical experts have told us that, if used in a sanitary and controlled way, heroin itself does not cause health problems—apart from a high level of dependence. Rosemary Jenkins from the Department of Health told us that "clean heroin is not in itself particularly dangerous except of course for the area we all know about which is that it is highly addictive and produces dependence".[151]

152. Professor Nutt told us that, if managed properly, heroin use need not prevent an individual from having a relatively normal life:

"Clean heroin clearly if used appropriately is safe...we have seen patients who have been using heroin for 20 or 30 years on a three to four times a day basis just to keep their dependence at bay. Some of these are very successful individuals. As long as you do not get the secondary complications of heroin like hepatitis or AIDS, then heroin is quite safe provided you do not overdose on it. You do get dependent on it, so it does affect the mind and there is no doubt that these people are heavily dependent but they are not physically harmed".[152]

153. It is this dependence, frustrated by the illegality—and therefore inaccessibility—of the substance, which causes users to engage in a cycle of high risk and damaging behaviour in order to obtain the heroin on which they depend. The main harm to health associated with use of illegal heroin are overdose and risks associated with unsanitary using techniques, particularly injecting. These are both risks which can be managed. The reason people die of heroin overdose is largely because of the body's loss of tolerance. A user builds up tolerance to heroin very quickly, and correspondingly increases the dose needed to achieve a "high". If for some reason—entering into custody, abstinence treatment, or being unable to find a "fix" for some time—the individual does not have heroin for a short while, their tolerance is completely lost. If they then gain access to heroin and take the dose they were on before losing tolerance, they overdose. If an addict is to live safely, understanding and managing the correct dose of the drug is of utmost importance. Risky using techniques are usually sharing needles and using dirty equipment. This spreads blood borne viruses such as AIDS, Hepatitis B and C.

154. Because users cannot easily purchase clean heroin and safe equipment, they will use whatever they can find: often dirty or shared equipment. Ignorance of how tolerance to the drug ebbs and flows will lead people to make fatal mistakes about safe dosages. Because their habit is illegal, they cannot—or do not—readily come forward for advice from health professionals. The Report of the Advisory Council on the Misuse of Drugs stated in its report *Reducing Drug Related Deaths*, "what stands out with total clarity is that year after year it is heroin misuse which is making the major contribution to drug-related deaths".[153]

155. Deaths have also resulted from impurities present in street heroin, although we were told that this was a minor problem in comparison to that of overdose.[154] The presence of impurities also means that users cannot always know how much heroin they are taking, which may lead users to take a dangerous dose in error.

Treatment

156. Existing users must be able to have access to treatment. In the case of opiate use a treatment model exists which has been proven to work and to deliver not only health improvements, but also lifestyle improvements, reductions in criminality and an economic saving to society: methadone programmes backed up with help with housing, employment and other lifestyle problems.[155]

157. However, we have heard widespread disappointment with treatment for heroin users. Although methadone is the standard treatment for opiate users, and has a strong evidence base for its effectiveness, we have heard that the number of available places for patients is much too small: "methadone treatment is...not universally available in this country, so we do not...have the standard intervention for long-term opiate drug use available to everybody in this country".[156]

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CORRECTION

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State of Alaska

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145 Q. 488. Back

146 Rosemary Jenkins, Department of Health, Q. 46. Back

147 Q. 613. Back

148 *Drug Misuse declared in 2000*, pp. 74-81. Back

149 Numbers were calculated as between 162,544 and 243,820 in a recent study, *A comparison of different methods for estimating the prevalence of systematic drug misuse in Great Britain*, M Frischer, M Hickman, F Mariani, L Kraus and L Wiessing (2001), *Addiction* 96 1465-1476, quoted in *Official Report*, 21 November 2001, 353W. Back

150 *Drugs and the Law*, p. 21. Back

THE GOVERNMENT'S DRUGS POLICY: IS IT WORKING?

Harm to users

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131 Q. 1271. Back

132 QQ. 1268; 1270. Back

133 Q. 208. Back

134 QQ. 301-2. Back

135 *Drugs and the Law*, p. 48. Back

136 *Drug Misuse declared in 2000*, pp. 34-5; 74-8. Back

137 *Ibid*, pp. 36; 45. Back

138 Q. 563. Back

139 Professor Nutt, Q. 484. Back

140 Independent Drug Monitoring Unit, Ev 111. Back

141 *Drug Misuse declared in 2000*, p. 45. Back

142 National Treatment Agency, Ev 142 Back

143 *Drug Misuse declared in 2000*, pp. 74-79. Back

144 Q. 1272. Back

145 Q. 488. Back

146 Rosemary Jenkins, Department of Health, Q. 46. Back

147 Q. 613. Back

148 *Drug Misuse declared in 2000*, pp. 74-81. Back

149 Numbers were calculated as between 162,544 and 243,820 in a recent study, *A comparison of different methods for estimating the prevalence of systematic drug misuse in Great Britain*, M Frischer, M Hickman, F Mariani, L Kraus and L Wiessing (2001), *Addiction* 96 1465-1476, quoted in *Official Report*, 21 November 2001, 353W. Back

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158. Professor Strang, Professor of Addictions and Director of the National Addiction Centre told us:

"the Government...are missing a golden opportunity to harvest huge benefits. With some types of treatment for some types of drug problems you have treatments which more than pay for themselves for each day the person is in treatment. This is the equivalent of the Post Office or the Bank of England releasing bonds which you can buy for one pound each and cash them in the afternoon for a fiver. I have to say if that happened I would go out and I would buy, buy, buy. It is beyond understanding why that approach is not adopted with those bits of treatment where there is a rock solid evidence base that the benefit more than pays for the costs".[157]

159. We also heard that methadone was not always given out in the correct doseages. Dr Colin Brewer told us: 'The average methadone dose in this country...is somewhere round about 50mg to 60mg whereas the national guidelines say that somewhere between 60mg and 120mg and an average probably nearer 90mg to 100mg is what we should be aiming at".[158]

160. **We recommend that the Government substantially increases the funding for treatment for heroin addicts and ensure that methadone treatments and complementary therapies are universally available to those who need them. We recommend that the guidance on the correct dosage of methadone to be used is strengthened.**

161. There are, however, many users for whom methadone does not work well, and there cannot be the expectation that one solution will work for everyone. As Dr Brewer suggested:

"an addiction and treatment unit should be rather like a family planning clinic. You do not go to a family planning clinic to be told you can have the pill and nothing else. Everybody who goes to a family planning clinic knows broadly why they are there and you discuss sensibly with the staff a range of options and if you do not like one, they will offer you another. Addiction treatment has to be like that".[159]

162. We received evidence of effective work being done by residential centres for drug users. Mr Bill Nelles, General Secretary of the Methadone Alliance and former drug user, told us:

"residential rehab is very important. It changed my life. Without a doubt, by going into residential rehab at the time I did, I learnt essential principles of self-discipline which kept me alive and that is why it is very valuable".[160]

163. This is a particularly important treatment for addicts living in a community where heroin use is common. Mrs Tina Williams of Parents and Addicts against Narcotics in the Community, told us "a lot of [addicts] cannot get clean in the community, there is too much [drug use] around them, they can see it all the time".[161] Lord Adebowale, Chief Executive of Turning Point, told us that residential facilities were particularly important for homeless people, to create some stability in their lives before treatment could start:

"there is a high proportion of homeless, rough sleepers who have substance misuse problems where accommodation is an essential base for treatment. It is not the treatment and

that is often the error which is made. Residential services are not the treatment but they are required to treat those people who are extremely chaotic and may exist on our streets".[162]

164. **We recommend that the broadest possible range of treatments is made available to opiate users, and that all treatments and therapies should have abstinence as their goal.**

165. It should be recognised, too, that there is no point in weaning people off their habit if, at the end of their treatment, they are returned to the environment that gave rise to their addiction. To be effective treatment will, therefore, have to be combined with other measures such as help with housing, education and employment to help put back together otherwise chaotic lives.

Methadone treatment in prison

166. We have also been told that treatment within prisons for opiate misuse is not consistent with that available in the community. Entering custody can, therefore, disrupt a treatment package, making it less likely that treatment will succeed.[163]

167. In particular, the Committee has heard, offenders are likely to be offered detoxification in the first instance. Mr Ainsworth seemed to confirm this when he said "Overwhelmingly, if they are going in and the length of sentence is such that detoxification can be completed, then whether or not they have been on treatment before they go in, detoxification is the road that people start to look at".[164] This is contrary to the medical best practice advice in the community, as Dr Andy Thompson of the NHS Alliance told us: "All the evidence that we have in opiate abuse is that in moderate to high dose maintenance methadone is the most effective treatment while waiting for people to realise that they want to come off opiates".[165]

168. We noted this problem in our report of 1999 into *Drugs and Prisons* (the "new strategy" referred to below is the current National Strategy):

"concerns centred on possible unjustifiable variations in practice in different establishments in the way detoxification was tackled and in the extent to which prisoners already on a prescribed drug substitution programme on entry into prison could continue the programme...Provision of appropriate prescription courses for drug misusers is, quite correctly, a matter ultimately for clinical judgement; nevertheless it is clear there is continuing dissatisfaction from qualified observers as to the lack of consistency in present practice. We trust that the new strategy, through increased availability of services, will enable some of the inconsistencies to be removed, but the Prison Service needs also to review whether further guidance needs to be prepared and distributed and whether implementation needs to be more closely monitored".[166]

169. **We recommend that appropriate treatment forms a mandatory part of custodial sentences and that offenders have access to consistent treatment approaches within the prison estate as well as outside it. This should include strictly supervised methadone treatment in the first instance, as the most effective treatment available.**

170. We have heard that an anomaly exists in respect of prison drug treatment facilities, in that, unlike services in the community, they are not audited by the National Treatment Agency. We believe that this situation is unsatisfactory.

171. **In the interests of consistency, we recommend that the National Treatment Agency should have responsibility for auditing drug treatment services in prisons, as it does for services outside prisons.**

Helping users into treatment

172. Not all users want to be treated. There will usually come a point when treatment does seem more appealing to most users than the other alternatives open to them, but for a large part of their using career this will not be apparent. It is vital that treatment programmes are well publicised, that addicts know where to go to seek treatment and that they are encouraged to join such programmes. However, some will still be reluctant. In the meantime it is necessary to minimise the harm which even these users are causing to themselves and others, in the hope of providing a bridge into a more ordered way of life. The user can then be offered treatment with the eventual goal of abstinence. One obvious possibility is the provision, under strict conditions, of legal, clean heroin (or diamorphine) to persistent heroin addicts.

Diamorphine provision

173. Doctors in Britain are unusual in the world in already having limited access to diamorphine prescribing as a treatment for opiate addiction. The Home Office has the ability to grant a licence to prescribe in this way, upon application by a doctor. However, we have heard that this system is not operating very effectively, and that the number of doctors possessing and using these licences appears to be very small. Professor Gerry Stimson, Director, Centre for Research on Drugs and Health Behaviour, Imperial College School of Medicine and Chair, UK Harm Reduction Alliance, submitted to the Committee an unpublished report of a study he conducted into doctors prescribing diamorphine to opiate dependent drug users in the UK.[167] The study looked at the doctors listed by the Home Office as having a licence to prescribe diamorphine, and also asked 108 potentially eligible doctors, why they did not have a licence. The conclusions raised questions about the Home Office's record-keeping as well as about prescribing practices. Of 164 doctors on the Home Office list, thirty-two had moved away from the address held and could not be traced. Forty-one on the list reported that they did not, in fact, hold a licence. Seventy reported they currently held a licence, of which only forty-six were currently using it to prescribe.

174. Practices of those using their licences varied widely, in terms of the number of patients to whom they were prescribing and the doses used. When asked under what conditions they might consider prescribing diamorphine to more patients, licence holders cited lower drug and dispensing costs, better facilities, evidence of effectiveness compared to methadone and more support from Government and health authorities for it.

175. Doctors eligible for but not holding licences (108 eligible doctors asked and 59 replied) were asked their reasons for not holding a licence. Two had applied for a licence and been turned down. Others cited lack of resources, little research evidence or best practice guidance on diamorphine, the anticipation of problems for patients, the belief that diamorphine was unsuitable for opiate treatment, concern that a "honeypot effect" might overwhelm the clinic, and belief that there was no demand for it.

176. The main conclusion of this study was that "in spite of eighty years of prescription of diamorphine to opiate addicts in the UK, no clear consensus has yet emerged for who should be treated and in what way, and what benefits they might expect to receive thereby". The article goes on, "these questions can only be resolved by research, but up to this date this has been inadequate".

177. **We conclude that the licencing system of providing a limited number of heroin addicts with diamorphine on prescription is badly monitored and evaluated, provides practitioners with inadequate training and guidance, and patients with a variable standard of care.**

178. **We recommend that a proper evaluation is conducted of diamorphine prescribing for heroin addiction in the UK, with a view to discovering its effectiveness on a range of health and social indicators, and its cost effectiveness as compared with methadone prescribing regimes.**

179. **We recommend that the guidance and training provided to practitioners prescribing diamorphine to heroin addicts is strengthened, with a view to spreading best practice.**

Swiss and Dutch research

180. Persuasive evidence of the effectiveness of diamorphine prescribing does, however, exist elsewhere in Europe. We took evidence from Professor Juergen Rehm, Director and Chief Executive, Addiction Research Institute, Zurich, Switzerland, and Senior Scientist, Centre for Addiction and Mental Health, Toronto, Canada, and from Dr Gerrit Van Santen, from Amsterdam Municipal Public Health Laboratory, both of whom have been involved with pilots of diamorphine prescribing to heroin addicts, in Switzerland and The Netherlands respectively.

181. Professor Rehm's study found that treatment of heroin addicts in Switzerland with prescribed heroin was often successful, with many patients going on to methadone treatment or abstinence therapy after being treated with prescribed heroin.[168] Results from the Dutch trial were also positive. The study found that the treatment led to improvements in patients' physical and mental health, and significant reductions in illegal activities amongst the patients. The researchers found that they were able to deliver the treatment programme without serious health risks for the treatment staff or the patients. Nor were there serious public order and controllability problems for the treatment staff or the neighbourhood.[169]

Both Professor Rehm and Dr Van Santen also told us that the programmes were set up in such a way that there was no leakage of pharmaceutical heroin from the clinics onto the black market.[170] The drugs were only dispensed under strict supervision. The Swiss study also found that the heroin prescribing programmes saved money for society. While the programmes were expensive to run, the reduced criminality of patients and improved health meant that, overall, savings were made to the criminal justice and health systems.

182. The Home Secretary has indicated that he is looking at the possible expansion of heroin prescription to addicts, and has set up a team of experts to consider the issue. Mr Ainsworth explained:

"What we are worried about is that the current guidance has led us to be a little too restrictive as to where we are prepared to offer heroin as a form of treatment and that there are situations where people are not being allowed access to that treatment where it may well be appropriate and that is in part because, or we believe it is in part because, of the guidance that we have given and the effective restriction of the guidance which has been given".[171]

183. The group of experts is expected to report back with their conclusions by the end of 2002. **We do not think that it is enough for the Government simply to expand the number of doctors licensed to prescribe diamorphine to heroin addicts.**

184. It has been persuasively argued to us that the legalisation and regulation of heroin would collapse the criminal market, drastically reduce the level of acquisitive crime and make addiction easier to treat. For reasons already given (see paragraph 65 above) we do not propose to go down this road. We do, however, accept that there is a strong case for bringing heroin use above ground, so that those who wish to be helped can be, and those who do not wish to be helped can at least indulge their habit at a minimum risk to their own health and that of the public. The obvious first step is the introduction of safe injecting houses (so-called "shooting galleries") of the sort that exist elsewhere in Europe. At their most basic these are places where addicts can go without fear of arrest to inject illegally purchased heroin and where practical advice is available as to the safest means of injection and the safe disposal of needles. The Home Office told us that "the current government position is that injecting rooms for illicit drugs should not be introduced in this country whilst we have no evaluations of those developed in other European countries".[172]

185. We believe that such facilities may offer potential to reduce harm. As well as helping users to reduce the risks to their health, safe injecting premises could make a significant impact on the nuisance caused to others by illicit injecting. All members of the Committee have heard from constituents about the problem of discarded needles and other paraphernalia in the street posing a health and safety risk, particularly to children. If injecting users could be directed to safe premises, needles could be disposed of in a safe way and the problem contained.

186. **We recommend that an evaluated pilot programme of safe injecting houses for heroin users is established without delay and that if, as we expect, this is successful, the programme is extended across the country.**

187. We go further. As we have seen, a number of other European countries have established carefully controlled programmes for the treatment of heroin users which involve making clean heroin (or diamorphine) legally available to users together with sanitary equipment and sound advice on dosage and injecting techniques. The aim is to help addicts manage their habit and in due course to wean them off their addiction. It also has the additional benefit for society as a whole that they no longer have to rely on acquisitive crime to fund their habit. As Mrs Tina Williams, whose son is addicted to heroin, put it to us "if you are treating the user with what they need to keep them well why would they go to the black market?".[173] The Association of Chief Police Officers said recently:

"There is a compelling case to explore further the merits of prescribing drugs of addiction to patients with entrenched dependency problems who have not responded to other forms of therapy...this should include the wider use of heroin within a menu of treatments".[174]

188. Opinion, however, is far from unanimous. Dr Claire Gerada, of the Royal College of General Practitioners, told us that providing diamorphine to addicts would mean "colluding and creating life long addicts".[175] We asked Mr Ralf Löfstedt, Deputy Director of the Swedish Ministry of Health and Social Affairs, for his opinion of heroin prescribing, given Sweden's more restrictive approach to drugs policy. He told us that providing prescribed heroin implied that some patients were "uncurable" and warned that society would be sending out inconsistent messages: "What will the effect on society be if we take more and more people directly from drug addiction into another type of drug addiction, but one sponsored by society?".[176] He also suggested that it might be harder to motivate addicts to take up treatment such as methadone and drug-free programmes if they were able to access clean heroin.[177] He told us that the reductions in crime which had been seen in the Swiss and Dutch programmes might not be sustained and suggested further that heroin treatment programmes might cause a rise in the numbers of new users.[178]

189. Mrs Williams told us that "on humanitarian grounds to prescribe controlled diamorphine to people that are really sick and need it is not a signal to encourage people to take it".[179] The Dutch report addressed many of the objections to diamorphine prescribing:

"It should be emphasised that drug users are not 'given up' when prescribing heroin, nor that it is accepted that these persons will remain addicted for the rest of their lives. Heroin prescription may be a new hold for heroin addicts for whom there has been no adequate treatment so far. By enabling drug users to return to their original intoxication through medically prescribed heroin, also the use of illicit drugs other than heroin may be reduced...In addition, through the prescription of heroin, medical and social care may be initiated and efforts may be undertaken to help these addicts to structure their lives, and—for some addicts—to achieve abstinence from drugs. For example, 10% of the patients admitted to the Swiss heroin program (22% of all discharges) left the program to start abstinence oriented treatment."[180]

190. **We conclude that the Dutch and Swiss evidence provides a strong basis on which to conduct a pilot here in Britain of highly structured heroin prescribing to addicts. We recommend that a pilot along the lines of the Swiss or Dutch model is conducted in the UK. Should such a pilot generate the positive results which one would expect from the Dutch and Swiss experience, we recommend that such a system should supersede the little-used "British system" of licensing.**

191. We recommend that a pilot offering prescribed diamorphine to heroin addicts is targeted, in the first instance, at chronic addicts who are prolific offenders.

Diamorphine for persistent addicts who have not yet accessed treatment

192. Professor Rehm and Dr Van Santen told the Committee that the Swiss and Dutch programmes to provide diamorphine to addicts were only to open to persistent addicts who had tried, and failed, to comply with other treatments such as methadone, over a period of some years. They emphasised, however, that this did not necessarily allow the most problematic group to be accessed, who were described as:

"a smaller group of not adapted people, who are actually causing lots of problems. They have a very high frequency of emergency room visits, they refuse any treatment and they take sometimes methadone in very low thresholds, but only if it is on an occasional basis—if it has to be on that day for whatever reason. Those are the kinds of drug users which cost the most to society".[181]

193. The suggestion is that diamorphine on prescription may offer a way of encouraging these people, too, to enter treatment. Dr Van Santen said: "I think the power of the prescribing of heroin lies not among those poor performers on methadone but on those people not reached yet by services, by necessary care".[182] Professor Rehm too described this as potentially a much more important role for diamorphine prescription than that explored by the trials: "we want to see can they attract non-treatment goers in our society, which is way more a problem in Switzerland".[183] He referred to a trial about to begin in Germany, run by Hamburg University, in which the criteria for admission to the scheme will be widened slightly to include not only those who have failed on an alternative treatment but also those who have not accessed any treatment for at least the past six months.[184]

194. We recommend that the Government commissions a further trial to look at the prescription of diamorphine to addicts who have not yet, or are not currently accessing any treatment, despite having a long history of heroin addiction.

195. It has been emphasised to us that diamorphine prescription should be used as a complement to already existing treatments which are backed up by strong evidence, such as methadone treatment. If diamorphine treatment could be offered to all problematic users who do not successfully access other treatments, we believe it could play a useful part in managing the social problems generated by this group of people.

151 Q. 106. Back

152 Q. 494. Back

153 *Reducing Drug Related Deaths*, p. 58. Back

154 Professor Nutt, Q492-3. Back

155 *NTORS at one year: The National Treatment Outcome Research Study:Changes in Substance Use, Health and Criminal Behaviour One Year after Intake,* Michael Gossop, John Marsden and Duncan Stewart, Department of Health, 1998 (hereafter "*NTORS at one year*"). Back

156 Bill Nelles, General Secretary of the Methadone Alliance, Q. 577. Back

157 Q. 572. Back

158 Q. 578. Back

159 Q. 584. Back

160 Q. 616. Back

161 Q. 1387. Back

162 Q. 592. Back

163 Dr Andy Thompson, NHS Alliance, Q. 1034. Back

164 Q. 1301. Back

165 Q. 1034. Back

166 Fifth Report of the Home Affairs Committee, 1998-99, *Drugs and Prisons*, HC 363-I, p. xlix. Back

167 *Survey of doctors prescribing diamorphine (heroin) to opiate dependent drug users in the United Kingdom*, Nicky Metrebian, Tom Carnwath, Gerry V Stimson, Thomas Storz, accepted for publication by *Addiction* magazine. Back

168 *Feasibility, safety and efficacy of injectable heroin prescription for refractory opiod addicts: a follow-up study*, Jürgen Rehm, Patrick Gschwend, Thomas Steffen, Felix Gutzwiller, Anja Dobler-Mikola, Ambros Uchtenhagen, *The Lancet* Vol. 358 No. 9291, 27 October 2001. Back

169 *Medical co-prescription of heroin: two randomised controlled trials*, Central Committee on the treatment of heroin addicts, Wim van den Brink, Vincent M. Hendriks, Peter Blanken, Ineke A. Huijsman, Jan M. van Ree, 2002 (hereafter "*Medical Co-prescription of heroin*"). Back

170 QQ. 882; 883. Back

171 Q. 1298. Back

172 Vol III, Ev 227. Back

173 Q. 1458. Back

174 *A Review of Drugs Policy and Proposals for the Future*, The Association of Chief Police Officers, Drugs Committee, April 2002, p. 16. Back

175 Q. 981. Back

176 Q. 1564. Back

177 Q. 1568. Back

178 Q. 1577; Q. 1578. Back

179 Q. 1466. Back

180 *Medical co-prescription of heroin*, Section 2.8.1. Back

181 Professor Rehm, Q. 796. Back

182 Q. 826. Back

183 Q. 839. Back

184 *The German project of heroin assisted treatment of opiate dependent patients: a multicentre, randomised, controlled clinical trial*, Principal Investigator: Prof. Dr. Michael Krausz, Deputy Director of the Centre of Psycho social Medicine, Psychiatry and Psychotherapy, Director of the Centre for interdisciplinary Addiction Research of Hamburg University. Back

THE GOVERNMENT'S DRUGS POLICY: IS IT WORKING?

OTHER ISSUES

196. While the Committee has focussed mainly on legislative change as offering solutions to the drugs problem in Britain, we have also looked at other issues. In *Tackling Drugs to Build a Better Britain*, Mr Hellawell said that "we must now shift our emphasis from reacting to the consequences of drug misuse to tackling its root causes".[185] In his *First Annual Report and National Plan* he reiterated this sentiment: "the overall aim of the ten-year strategy is to shift the emphasis away from dealing with the consequences of the problem, to actively preventing it happening in the first place".[186] Prevention is better than cure. It is also far cheaper, both in terms of cost to the individual and to society as a whole.

197. We have heard that the causes of damaging drug use include underlying mental health problems, social exclusion, deprivation and abuse, which are also implicated in drug-related

crime committed by users. A combination of education, social interventions and treatment, alongside enforcement will be required to tackle these causes. A recent report by the Advisory Council on the Misuse of Drugs observed that:

"On strong balance of probability, deprivation is today in Britain likely often to make a significant causal contribution to the cause, complication and intractability of damaging kinds of drug misuse...We want now and in the future to see deprivation given its full and proper place in all considerations of drug prevention policy".[187]

DRUGS EDUCATION AND PREVENTION WORK WITH YOUNG PEOPLE

198. Many witnesses have stressed to us the importance of preventive work with young people designed to discourage them from starting to take drugs. In fact this forms an important strand of the National Strategy, under the Young People target. The Home Office have told us how they are approaching this issue with a plethora of initiatives including the Personal, Social and Health Education curriculum, the *National Healthy School Standard*, the National Drugs Helpline, the new cross-departmental Children and Young People's Unit, *Positive Futures*, *Connexions*, Health Action Zones projects, Youth Offending Teams, and *Young People's Substance Misuse Plans*.

199. However, the Home Office has not presented us with any evidence of the effectiveness of this work. The Health Development Agency told us in evidence that:

"Most initiatives and innovations in the drug education and prevention field are not evidence-based and have not been subject to evidence-based evaluation. Initial findings from [our] review show that there are very few systematic reviews of drug education and prevention activity".[188]

200. Mr Mike Trace told the Committee:

"It was suggested in the strategy that a concerted programme of education in schools, backed up by more intensive programmes targeted at socially excluded children and adolescents, would achieve these targets [relating to reducing young people's drug use]. The evidence base for this hope was thin at the time and looks thinner now. While good drug education in schools, and investments in programmes for marginalised kids may be a good thing in their own right, they are unlikely to have an impact on the overall prevalence of young drug use, and will certainly not get anywhere near the target of a 50 per cent reduction".[189]

201. We are also concerned about the quality of drugs education material, and the possibility of ambiguous messages contained within it. We accept Mr Ainsworth's recognition that "preaching at young people is not going to work".[190] However, **we believe that all drugs education material should be based on the premise that any drug use can be harmful and should be discouraged.**

202. Our attention was drawn to two leaflets. The first was produced by DrugScope and entitled *What and why?: Cannabis*. This document explains in some detail what cannabis is, how it is taken, and some of the effects which may be expected. While the leaflet explains

that cannabis may have unpleasant effects upon the user, it also lists some perceived pleasurable effects:

"cannabis alters perception. The sensation is usually a pleasant one of general relaxation, a sense of being on the same wavelength as others who are 'stoned', and heightened sensitivity to colour and sound. Also common are the urge to eat ('the munchies') and fits of giggles as ordinary things become very funny".

203. The leaflet goes on to state that "Cannabis is usually smoked by people who are part of a social group that sees cannabis use as acceptable (or even normal) and who want to relax and enjoy the company of others". DrugScope told us that this leaflet is not aimed at children but at parents and drugs workers.

204. When we asked for further clarification of their philosophy, we were told that DrugScope "as an organisation prides itself on providing balanced, accurate drug information to professionals and the public". They went on:

"whether we like it or not, drugs are part of most young people's lives. It is from this premise that DrugScope believes young people should be given balanced, accurate information about drugs...A 'just say no approach' or shock tactics do not connect with young people's reality; they are not credible with young people who may think the message, in their experience, does not reflect the whole truth. The approach may also make young people seek information elsewhere, from friends, for example, which may not be accurate".[191]

205. The second leaflet given to us was produced by Lifeline and entitled *How to survive your parents discovering you're a drug user.* This leaflet includes a comic strip and some advice which includes:

"Don't get caught in the first place. Don't be blatant or obvious and remember: parents search bedrooms and coat pockets...If you do get caught, don't expect your parents to understand".

206. In response to our request for further information, Lifeline told us:

"Education and prevention are often confused, an assumption is made that drug education prevents people from taking drugs. There is no evidence that will stand up to serious scrutiny that supports this from anywhere in the world...In the mid 1980s when faced with the threat of AIDS amongst injecting drug users, Lifeline looked at the available evidence and spoke to drug users. Our conclusion was that we did not know how to stop people taking drugs...we therefore decided to look at what was possible. We believed that preventing HIV among injecting drug users was both a more serious threat and preventable...we are trying to reduce the harm from drugs by telling the truth; the lies and exaggerations of primary prevention campaigns just make our job harder".[192]

207. **We acknowledge the need to provide realistic drugs education, but we believe that examples such as the Lifeline leaflet cross the line between providing accurate information and encouraging young people to experiment with illegal drugs. We believe that publicly funded organisations involved in educating impressionable**

young people about drugs should take care not to stray across this line.

208. The parents of one recent young casualty of a heroin overdose, Rachel Whitear, made the difficult decision to release police photographs of their daughter's body in the hope of preventing others from using drugs. We applaud them for courageously allowing their daughter's photograph to be. **We do not share the view that confronting young people with shocking images of the harm caused by some drug use is counter productive.**

209. The initial memorandum from the Home Office to the Committee stated that:

"Earlier this year [2001] the Government commissioned a long-term study on the impact of drug, alcohol and tobacco education in schools. This will be a joint project between the Department for Education and Skills, the Department of Health and the Home Office. The study will look at which types of educational input and other factors, such as socio-economic and cultural have most impact on influencing behaviour. The project will start in the autumn."[193]

210. The study will conclude in 2007. We welcome the commissioning of this research, but until 2007, the Home Office must find other evidence on which to base policy. While we believe that drugs education and prevention work are desirable, we would be disappointed to see money being spent without evidence of effective outcomes from policy.

211. **We acknowledge the importance of educating all young people about the harmful effects of all drugs, legal and illegal. Nonetheless, we recommend that the Government conducts rigorous analysis of its drugs education and prevention work and only spends money on what works, focussing in particular on long term and problem drug use and the consequent harm.**

212. The point has also been made to the Committee that the young people most vulnerable to drug abuse are those excluded from school. It is therefore extremely important to aim drugs education programmes not only at those attending school, but, perhaps more importantly, at those who do not attend. The 1998/9 Youth Lifestyles Survey demonstrated that half of all truants and excluded children had used an illegal drug, as compared with 13% of school attenders. While only a tiny proportion of school attenders used Class A drugs regularly, 7% of excludees did so.[194] Mr Ainsworth told the Committee that:

"the degree to which we focus on those groups and the degree to which we are going outside the young people's area and the degree to which we link up with Neighbourhood Renewal and Social Exclusion Programmes—because that is where the main impact of drug misuse is being inflicted on communities—are issues that we are trying to pick up in the stocktaking review".[195]

213. **We recommend that drugs prevention and education programmes are targeted towards particularly vulnerable groups of young people, such as truants, those excluded from school and children in care.**

HEALTH AND SOCIAL CARE FOR USERS

214. The National Strategy contains a strong commitment to treatment for drug users. However, drug users not only require treatment for their drug problem; they also require general medical services, in common with the rest of the population.

215. We were surprised and disappointed by the minimal response to our request for evidence from the British Medical Association on this issue. We have heard disturbing evidence that a large, albeit decreasing, proportion of GPs appears to be unwilling to treat drug users, with the effect that many users are without access to general medical services. Dr Claire Gerada of the Royal College of General Practitioners, told us that according to estimates made in the 1980s,

"around 5-10% of general practitioners were actively involved in the care of drug users. Of these doctors that were involved they tended to have large numbers of patients with some estimates showing that 5% of general practitioners looked after 50% of all the drug using patients receiving treatment in a primary care setting".[196]

216. Dr Gerada went on to tell us that a more recent, unpublished study suggested that GP involvement has risen since then:

"50 per cent of a random sample of English GPs had seen a drug user in the last month and 25 per cent of the total...had prescribed methadone to a drug user...also the numbers of [drug-using] patients each GP is seeing...has doubled as well".[197]

217. Dr Gerada pinpointed the minimal training of GPs in this area as the reason for any residual reluctance to treat drug users. She told the Committee that, in an average five year undergraduate training course, a medical student is given around thirty minutes training in drug misuse problems. She said that: "every single doctor wherever they practise, maybe in the Outer Hebrides, will see a drug user and yet there is virtually no training in it".[198] This lack of understanding "breeds prejudice, it breeds fear".[199] We were encouraged to hear, however, that the number of GPs interested in training was high.[200]

218. **We conclude that General Practitioners are, for the most part, inadequately trained to deal with drug misuse. We recommend that training in substance misuse is embedded in the undergraduate medical curriculum and postgraduate General Practice curriculum, as a problem which will arise with increasing frequency over the careers of all prospective doctors training today. We recommend that the Department of Health funds more training courses in substance misuse for existing General Practitioners.**

219. **We would also expect the British Medical Association and the Royal College of General Practice to take a rather greater interest in this area than is evident so far. In particular we would expect these organisations to use their considerable influence to ensure that treatment of drug misuse is included in the medical curricula. We would also expect the professional bodies to encourage more of their members to take an interest in treating drug abusers so that a handful of dedicated General Practitioners are not left to shoulder the burden alone.**

185 *Tackling Drugs to Build a Better Britain*, p. 8 Back

186 *First Annual Report and National Plan*, Cabinet Office 1999, p. 1. Back

187 *Drug Misuse and the Environment*, Advisory Council on the Misuse of Drugs, Home Office, 1998, pp. 113; 115. Back

188 Ev 104. Back

189 Ev 182. Back

190 Q. 1312. Back

191 Vol III, Ev 274. Back

192 Vol III, Ev 273-4. Back

193 Ev 2. Back

194 *At the margins: drug use by vulnerable young people in the 1998/99 Youth Lifestyles Survey*, Chris Goulden and Arun Sondhi, Home Office Research Study 228, 2001, p. vi. Back

195 Q. 1313. Back

196 Vol III, Ev 242. Back

197 Q. 927. Back

198 Q. 941. Back

199 Q. 944. Back

200 Q. 927. Back

THE GOVERNMENT'S DRUGS POLICY: IS IT WORKING?

Treatment for Hepatitis C

246. We have received some evidence that injecting drug users are denied treatment for Hepatitis C. A group of drugs treatment professionals, Action against Hepatitis C, told us that although deaths from Hepatitis C can be prevented by treatment, some guidelines exclude current injecting drug users. They told us:

"This is a major concern because drug users form the greatest number of those who are infected with [Hepatitis C Virus]. It ignores the human right to life and will considerably increase the morbidity and mortality of drug users".[229]

247. While the Home Office told us that this exclusion was based on clinical concerns of reinfection and non-compliance, our evidence contradicted this.[230]

248. **We recommend that the Government reviews existing guidelines on the treatment of injecting drug users for Hepatitis C and amends the guidelines if necessary to ensure that users are not excluded from treatment.**

Paraphernalia

249. Other harm reduction activities are obstructed by the regulations in the Misuse of Drugs Act relating to drugs paraphernalia—the equipment used by people taking drugs. Professor Stimson told the Committee:

"Section 9A [of the Misuse of Drugs Act] which deals with drug paraphernalia laws would be best done away with altogether...There is an exemption for syringes but not for other equipment which may make drug use safer...Some of the drug paraphernalia makes the ingestion of drugs safer...It is in the Act to discourage drug use but I do not see that it actually does".[231]

250. Mrs Christine Glover, of the Royal Pharmaceutical Society, reiterated this point:

"We have an ironical situation where we are not allowed to supply the paraphernalia which also helps with harm reduction. It is not appropriate that we are in a situation where we cannot make a supply of citric acid or a swabs order for injection because we are breaking the law...It is a nonsense".[232]

251. The Minister seemed unaware of this concern:

"Overwhelmingly the provision of equipment has been about syringes and needles, for obvious reasons, because it is blood borne infections that people that have been worried about, Hepatitis B, Hepatitis C and HIV. If there is a case that can be made for the provision of other equipment we will be happy to look at it".[233]

252. We recommend that the Government reviews Section 9A of the Misuse of Drugs Act 1971, with a view to repealing it, to allow for the provision of drugs paraphernalia which reduces the harm caused by drugs.

Premises

253. The Committee has also heard numerous representations concerning Section 8 of the Misuse of Drugs Act, which regulates premises used for the consumption of drugs. Section 8 has been recently amended to make it more comprehensive in its reach. The Section makes it an offence for landlords knowingly to allow use of any drug on their premises, which makes it difficult to look after people who are known drug users.

254. Drugs agencies have expressed concerns that Section 8 will make it impossible for them to continue to help individuals known to be using drugs, and impossible for them to help them to take their drugs in safer ways on their premises. Professor Stimson told us:

"Section 8...is a very problematic section, partly because drug paraphernalia can be used as evidence of drug use on premises and that makes the harm reduction effort more difficult. It is a difficult section because people who are working with hard-to-reach drug users may often be in circumstances where drug use may be taking place and it makes their task very difficult to have that piece of the Act".[234]

255. DrugScope showed a similar concern:

"Section 8 of the Misuse of Drugs Act should be reviewed and amended as appropriate to ensure that services and individuals helping vulnerable people and drug users do not fall within its purview. There is considerable disquiet that the recent hasty amendment to the Misuse of Drugs Act 1971 was ill-conceived and potentially damaging to those working with at-risk groups".[235]

256. Mr Ainsworth did not seem to see this as a major problem:

"There is some worry and we took representations over a period of time in order to try to satisfy ourselves that Section 8 provisions were appropriate, where necessary, and would not lead to people being criminalised in an inappropriate situation...If we were to give some kind of exemption to people in any given circumstance then we could find ourselves in a situation where facilities were being abused and the prosecuting authorities would have no ability to deal with the issue. We are only aware of a couple of problems...As long as people are sensible about how they use these provisions we would be very loathe to lose them with the consequences that could arise in terms of facilities being abused rather than used."[236]

257. **We recommend that Section 8 of the Misuse of Drugs Act 1971 is amended to ensure that drugs agencies can conduct harm reduction work and provide safe injecting areas for users without fear of being prosecuted.**

Dispensing

258. We heard from the Royal Pharmaceutical Society that antiquated regulations make it much more difficult for community pharmacists to dispense controlled drugs such as methadone to users in a sensible and efficient way:

"Pharmacists providing services for drug misusers are often placed in potentially confrontational situations with clients as a result of:

- Prescriptions not satisfying legal requirements
- Instalment dispensing
- Requests for collections by clients representatives
- Dispensing for public and local holidays...

The key areas relate to:

- the rules for prescribers' handwriting exemptions on controlled drugs prescriptions should be reviewed by the Home Office
- pharmacists should be able to amend instalment prescriptions after contacting the prescriber
- the Misuse of Drugs Regulations relating to instalment dispensing need updating and amendment of facilitate action when a client fails to collect
- the Regulations should be amended to allow an instalment scheduled for supply on a day when the pharmacy will be closed to be supplied on the preceding day
- there should be a review of the legality of dispensing prescriptions for methadone mixture where the client asks for variation from the formulation prescribed
- the maximum number of days' treatment on any prescription for drug misusers should be 14 days".[237]

259. Mr Ainsworth told the Committee that:

"this is not an issue that has been raised with me...I have to admit that I have not talked directly with pharmacists...We will need to pick that up and find out whether or not there is an issue...If there are issues that pharmacists want to raise obviously we will look at them".[238]

260. **We recommend that the Home Office and the Department of Health urgently review the current legal framework on the dispensation of controlled drugs by community pharmacists in consultation with the Royal Pharmaceutical Society.**

Treatment through the criminal justice system

261. One of the Government's innovations has been the enhancement of treatment options available to drug users through the criminal justice system, through Drug Treatment and Testing Orders and Arrest Referral Schemes. Drug Treatment and Testing Orders are community sentences which require offenders—with their consent—to undergo treatment and other programmes, designed to tackle their drug misuse and offending, at a specified place for a period of between six months and three years. Under the terms of the Order, offenders must also be tested regularly for illegal drugs, and attend court for periodic reviews of their progress. Under Arrest Referral Schemes, drugs workers visit police custody suites to offer advice and services to drug users. In the main, evidence to the Committee has been positive about the impact of such initiatives, although the Substance Misuse Faculty at the Royal College of Psychiatrists told us that they "do not believe that evidence supports the efficacy of coercive treatments".[239]

262. The Committee has heard representations that the schemes have, in some places, been set up in such a way that offenders receive preferential treatment over non-offenders: "in some districts, the quickest way to access treatment is to commit a serious crime".[240] **We consider it highly undesirable that it should be easier for a drug addict to access treatment through the criminal justice system than in the community. This is a further reason, if any were needed, for the Government to provide more treatment in the community.**

263. A new sanction being piloted in sentencing drugs offenders is the Drug Abstinence Order, which requires the offender to remain abstinent as a condition of his or her sentence. Mr Roger Howard, Chief Executive of DrugScope, told us that his organisation had lobbied for conditions of treatment to be attached to these Orders, without success. Their view was that "the requirement for someone with a potential drug problem to remain drug free without adequate access to treatment is irresponsible".[241] Mr Ainsworth assured the Committee:

"For those for whom it is felt appropriate, we should be offering drug treatment and testing orders. For people who have a lower level of dependency, then it may well be that drug abstinence orders are appropriate...we have no desire or intent to roll these pilots out and to make them available nationwide before we have the treatment capacity in order to be able to refer people on...Drug abstinence orders should not be being used, and I have heard the allegation, 'setting people up to fail', but they should be used in circumstances where people should be able to cope with the commitment that they are being expected to make without the testing requirement and we should not be pushing them in there if there is no treatment available".[242]

264. **We recommend that Drug Abstinence Orders are amended to carry the requirement of access to treatment.**

229 Action on Hepatitis C, Ev 17. The "UK guidelines" referred to are the *Report of the National Institute for Clinical Excellence: Guidance on the Use of Ribavirin and Interferon Alpha for Hepatitis C*, 2000, *Clinical Guidelines on the management of hepatitis C*, British Society of Gastroenterology, 2001, and *Consensus Statement*, EASL International Consensus Conference on Hepatitis C, 1999, *Journal of Hepatology*, 30, pp. 956-961. Back

230 Vol III, Ev 227; our evidence cited two articles, *Is it Justifiable to Withhold Treatment for Hepatitis C from Illicit Drug Users?* Edlin, B.R., Seal, K.H., Lorvick, J., *et al*, 2001, *New England Journal of Medicine*, Vol 345, No 3, pp. 211-214 and *Treatment of hepatitis C infection in injecting drug users*, Backmund, M., Meyer, K., Von Zielonka, M., & Eichenlaub, D., 2001, *Hepatology*, 34, (1), pp. 188-193, cited in Ev 17-18. Back

231 QQ. 522; 524-5. Back

232 Q. 961. Back

233 Q. 1333. Back

234 Q. 526. Back

235 Ev 46. Back

236 Q. 1332. Back

237 Ev 176. Back

238 Q. 1335; 1337. Back

239 Ev 174. Back

240 Substance Misuse Faculty, Royal College of Psychiatrists, Ev 174. Back

241 Ev 46. Back

242 Q. 1303. Back

THE GOVERNMENT'S DRUGS POLICY: IS IT WORKING?

INTERNATIONAL TREATIES

265. The United Kingdom is one of many signatories to several international treaties on drugs, which constitute a fairly restrictive cradle around our own legislative regime. Significant changes, such as the legalisation of some or all drugs, could not be pursued unilaterally without transgressing the treaties, and could therefore only follow their renegotiation.

266. Having said this, the treaties do not lay down specific control mechanisms within the basic premise of criminality of drug possession and supply. With this in mind, there is actually substantial "room for manoeuvre" within the treaties for change to the UK's regime. In fact, all of our recommendations could be implemented without breaching the treaties or requiring their renegotiation. In the long term, however, we believe the time has come for the international treaties to be reconsidered. The Commission on Narcotic Drugs is the central policy-making body within the United Nations system dealing with drug-related matters. It compiles biannual reports on the global drug situation and develops proposals to strengthen the international drug control system.

267. **We recommend that the Government initiates a discussion within the Commission on Narcotic Drugs of alternative ways—including the possibility of legalisation and regulation—to tackle the global drugs dilemma.**

THE GOVERNMENT'S DRUGS POLICY: IS IT WORKING?

CONCLUSIONS

268. There are no easy answers to the problems posed by drug abuse, but it seems to us that certain trends are unmistakable. If there is any single lesson from the experience of the

last 30 years, it is that policies based wholly or mainly on enforcement are destined to fail. It remains an unhappy fact that the best efforts of police and Customs have had little, if any, impact on the availability of illegal drugs and this is reflected in the prices on the street which are as low as they have ever been. The best that can be said, and the evidence for this is shaky, is that we have succeeded in containing the problem.

269. What we do know is that the ready availability of illegal drugs is sustaining a vast criminal industry and that the need of addicts to fund their habit is responsible for an enormous amount of acquisitive crime. We also know that the harm caused by illegal drugs varies immensely from one drug to another and—since most users and potential users know this—there is no point in pretending otherwise.

270. It, therefore, seems to us that certain conclusions follow inexorably: First, that harm reduction rather than retribution should be the primary focus of policy towards users of illegal drugs. We are glad to note that the Government is making the first tentative steps in that direction. We believe it should go further and have offered some suggestions.

271. Second, that law enforcement should focus primarily on the criminal network responsible for manufacturing and importing the most harmful drugs—notably heroin and cocaine. We are glad to note that increasingly this is happening.

272. Three, that we should invest in a programme of education—addressing all forms of drug abuse, including cigarettes and alcohol—to make young people aware of the damage they can inflict upon themselves and others. To be effective, however, such programmes must be realistic, honest, targeted and preferably delivered by someone with "street credibility"—recovered addicts, for example.

273. Four, we have to recognise that, however much advice they are offered, many young people will continue to use drugs. In most cases this is a passing phase which they will grow out of and, while such use should never be condoned, it rarely results in any long term harm. It therefore makes sense to give priority to educating such young people in harm minimisation rather than prosecuting them. The Government's recent advice to users of so-called "recreational drugs", *Safer Clubbing*, is a welcome step in this direction.

274. Five, overwhelmingly we should focus on treating or reducing the harm caused by the 250,000 or so problematic users whose habit is damaging not only their own lives, but those of their families and the communities in which they live. Although there are recent signs of improvement, treatment facilities remain woefully inadequate.

275. Finally, many sensible and thoughtful people have argued that we should go a step further and embrace legalisation and regulation of all or most presently illegal drugs. We acknowledge there are some attractive arguments. However, those who urge this course upon us are inviting us to take a step into the unknown. To tread where no other society has yet trod. They are asking us to gamble the undoubted potential gains against the inevitability of a significant increase in the number of users, especially amongst the very young. They are overlooking the fact that the overwhelming majority of young people do not use drugs and that many are deterred by the prospect of breaking the law. We, therefore, decline to support legalisation and regulation.

276. It may well be that in years to come a future generation will take a different view. Drugs policy should not be set in stone. It will evolve like any other. For the foreseeable future, however, we believe the path is clear.

SUMMARY OF KEY CONCLUSIONS AND RECOMMENDATIONS

1.
We believe that drugs policy should primarily be addressed to dealing with the 250,000 problematic drug users (paragraph 38).

2.
While acknowledging that there may come a day when the balance may tip in favour of legalising and regulating some types of presently illegal drugs, we decline to recommend this drastic step (paragraph 66).

3.
We accept that to decriminalise possession of drugs for personal use would send the wrong message to the majority of young people...and that it would inevitably lead to an increase in drug abuse. We, therefore, reject decriminalisation (paragraph 74).

4.
We are not persuaded that an intent to supply should be presumed on the basis of amounts of drugs found; we therefore recommend that the offences of simple possession and possession with intent to supply should be retained without alteration (paragraph 77).

5.
We recommend that a new offence is created of "supply for gain", which would be used to prosecute large scale commercial suppliers (paragraph 83).

6.
We support...the Home Secretary's proposal to reclassify cannabis from Class B to Class C (paragraph 121).

7.
We...recommend that ecstasy is reclassified as a Class B drug (paragraph 135).

8.
We recommend that the number of treatment places for cocaine users is substantially increased. We recommend that resources are channelled into researching and piloting innovative treatment interventions for cocaine users (paragraph 140).

9.
We consider that the risks posed by cocaine to the user and to other people merit it remaining a Class A drug (paragraph 141).

10.
We recommend that more treatment places are created for crack users and that resources be channelled into researching and piloting more effective treatments. We further recommend tnat in the meantime efforts are redoubled to extinguish supply of crack cocaine (paragraph 147).

11.
We recommend that the Government substantially increases the funding for treatment for heroin addicts and ensure that methadone treatments and complementary therapies are universally available to those who need them (paragraph 160).

12.
We recommend that appropriate treatment forms a mandatory part of custodial sentences and that offenders have access to consistent treatment approaches within the prison estate as well as outside it. This should include strictly supervised methadone treatment in the first instance (paragraph 169).

13.
We recommend that a proper evaluation is conducted of diamorphine prescribing for heroin addiction in the UK...as compared with methadone prescribing regimes (paragraph 178).

14.
We recommend that the guidance and training provided to practitioners prescribing diamorphine to heroin addicts is strengthened (paragraph 179).

15.

We recommend that an evaluated pilot programme of safe injecting houses for heroin users is established without delay and that if...this is successful, the programme is extended across the country (paragraph 186).

16.
We conclude that the Dutch and Swiss evidence provides a strong basis on which to conduct a pilot here in Britain of highly structured heroin prescribing to addicts. We recommend that a pilot along the lines of the Swiss or Dutch model is conducted in the UK. Should such a pilot generate the positive results which one would expect...we recommend that such a system should supersede the little-used "British system" of licencing (paragraph 190).

17.
We believe that all drugs education material should be based on the premise that any drug use can be harmful, and should be discouraged (paragraph 201).

18.
We conclude that General Practitioners are, for the most part, inadequately trained to deal with drug misuse. We recommend that training in substance misuse is embedded in the undergraduate medical curriculum and postgraduate General Practice curriculum...We recommend that the Department of Health funds more training courses in substance misuse for existing General Practitioners (paragraph 218).

19.
We recommend that a target is added to the National Strategy explicitly aimed at harm reduction and public health (paragraph 245).

20.
We recommend that the Government reviews Section 9A of the Misuse of Drugs Act 1971, with a view to repealing it, to allow for the provision of drugs paraphernalia which reduces the harm caused by drugs (paragraph 252).

21.
We recommend that Section 8 of the Misuse of Drugs Act 1971 is amended to ensure that drugs agencies can conduct harm reduction work and provide safe injecting areas for users without fear of being prosecuted (paragraph 257).

22.
We recommend that the Home Office and the Department of Health urgently review

the current legal framework on the dispensation of controlled drugs by community pharmacists (paragraph 260).

23.
We recommend that Drug Abstinence Orders are amended to carry the requirement of access to treatment (paragraph 264).

24.
We recommend that the Government initiates a discussion within the Commission on Narcotic Drugs of alternative ways—including the possibility of legalisation and regulation—to tackle the global drugs dilemma (paragraph 267).

ANNEX: NOTE ON IMPLEMENTATION OF THE COMMITTEE'S RECOMMENDATIONS

1. **"We do not agree with the Police Foundation. Those guilty of "social supply" should not escape prosecution for this offence on the basis that their act of supply was to their friends for their personal consumption. We believe that this act of "social supply", while on a different scale from commercial supply, is nonetheless a dangerous crime which must be punished as such" (paragraph 82).**

"We believe that while there are two different crimes of supply, the law only formally recognises one. We recommend that a new offence be created of "supply for gain", which would be used to prosecute large-scale commercial suppliers. So-called "social suppliers" who share drugs between their friends on a not-for-profit basis should continue to be prosecuted for supply" (pararaph 83).

1.1 At present, there is a single offence for "supply"[243] under the Misuse of Drugs Act 1971. The offence does not require proof of payment or reward so, for example, it would cover the act of passing a reefer cigarette to a friend so that he can have "a draw",[244] in addition to acts of large scale commercial supply.

1.2 Under the present statutory scheme, the following offences all carry the same maximum penalties for each class of drug:

— Importation

— Production

— Supply

— Possession with intent to supply

Where the above offences concern a Class A drug, the maximum penalty on indictment is life imprisonment.

1.3 Maximum penalties roughly reflect the gravity of an offence, but they do not determine the sentence that will actually be imposed in any given circumstance. The actual sentence will be one which, in the opinion of the court, is commensurate with the seriousness of the offence and which does not exceed the maximum. From time to time the Court of Appeal lays down guidelines for the sentencing of an offence or class of offences.

1.4 The new offence of "supply for gain" could be made subject to the same statutory maximum penalty as the existing offences of supply and possession with intent to supply. It would then be for the courts to determine appropriate sentences which reflect the relative gravity of offences, within that bracket. Alternatively, the new offence could have a higher maximum penalty to reflect the seriousness of supplying for gain. This could be achieved by reducing the maximum penalty for supply and possession with intent to supply (currently, life imprisonment) where gain is not involved. In addition, two new offences could be established, "supply for gain" and "possession with intent to supply for gain", which carried a maximum penalty of life imprisonment.[245]

2. "In the event of the successful completion of clinical trials and a positive evaluation by the Medicines Control Agency, we recommend that the law be changed to permit the use of cannabis-based medicines" (paragraph 109).

2.1 This recommendation requires an amendment to the Misuse of Drugs Regulations 1985 (S.I. 1985, No.2066, as amended).

2.2 At present, cannabis can only lawfully be produced, offered, supplied or possessed under licence by the Secretary of State.[246] There is no general exception which would otherwise permit its use for medicinal purposes.[247]

2.3 Section 7 of the Misuse of Drugs Act 1971 (MDA 1971) empowers the Secretary of State to make regulations which except specified controlled drugs from the restrictions of importation and exportation, production, supply and possession. The 1985 Regulations, which were made under this section, provides general exceptions for the drugs listed in Schedules 2 to 5.[248] This excludes cannabis, which is listed in Schedule 1 to the Regulations.

2.4 The drugs listed in schedules 2 and 3 (which include Class A, B and C drugs) are excepted (subject to conditions) from the restrictions of production, supply and possession. Different rules for record-keeping apply to each, with tighter requirements for Schedule 2 drugs. Schedule 4 excepts benzodizepines and anabolic steroids from most of the restrictions which apply to controlled drugs. Schedule 5 is concerned with preparations which contain very small proportions of controlled drugs.

2.5 The simplest means of implementing the Committee's recommendation would be to amend the 1985 Regulations in order to move cannabis from Schedule 1 to either Schedule

2 or 3. Schedule 2 may be the most appropriate categorisation, given that tighter record-keeping requirements apply.

3. "We support the Home Secretary's proposal to reclassify cannabis as a Class C drug" (paragraph 121).

"We...recommend that ecstasy is reclassified as a Class B drug" (paragraph 135).

3.1 These recommendations require amendments to Schedule 2, MDA 1971, which classifies controlled drugs into the three classes—A, B and C.

3.2 Reclassification must be implemented by Order in Council.[249]

3.3 The prescribed procedure is set out in section 2(5) of the Misuse of Drugs Act 1971.

- The Government must first consult the Advisory Council (unless it is acting on the recommendation of the Advisory Council).
- After consultation, the Government must lay a draft Order before Parliament, which must be approved by resolution of each House.
- Once the draft order has been approved by Parliament, the Government may recommend that Her Majesty in Council do make the Order.

3.4 The terms of the Order(s) would need to exclude ecstasy from the list of Class A drug[250] and include it in the list of Class B drug[251] and, similarly, exclude cannabis from the list of Class B drugs and include it in the list for Class C.[252]

4. "We recommend that appropriate treatment forms a mandatory part of custodial sentences and that offenders have access to consistent treatment approaches within the prison estate as well as outside it. This should include strictly supervised methadone treatment in the first instance, as the most effective treatment available" (paragraph 169).

4.1 The recommendation that appropriate treatment forms a mandatory part of custodial sentences is likely to require primary legislation. The recommendation that offenders have access to consistent treatment approaches does not appear to require legislation. It could be implemented through policy, as the existing legislation makes general provision for the medical treatment of prisoners.

4.2 The existing legislation does not, however, make *express* provision for treatment of drug addiction, nor does it require Prison Governors to make provision for drug treatments within the prison estate.

4.3 The Prison Act 1952 makes provision for prisoners who require medical attention, to receive it outside the prison estate, if the Secretary of State so directs.[253] In addition, there is general provision for the medical treatment of prisoners within the prison estate. For example, every prison must appoint a medical officer (who must be a fully registered medical practitioner), to be entrusted with "the care of the health, mental and physical, of the

prisoners of that prison".[254] Section 47 of the Act empowers the Secretary of State to make regulations (the "Prison Rules") for the treatment of prisoners, among other things.[255] Although neither the Act, nor the Prison Rules, make express provision for treatment of drug addiction, there is provision for drug testing.[256]

4.4. Rule 3 of the Prison Rules provides that the "purpose of the training and treatment of convicted prisoners shall be to encourage and assist them to lead a good and useful life". Treatment for drug addiction would not appear to fall outside that purpose. However, the courts have held (in the context of the "sex offender treatment programme") that the rule does not impose a mandatory duty on the Prison Service to provide a rehabilitative programme.[257]

4.5 The latter part of the Committee's recommendation could be implemented by amendment to the Prison Rules. For example, the Prison Rules could be amended by inserting a new Rule 20A:

"20A (1) For the purposes of this rule, the medical officer shall consult a medical practitioner who is a fully registered person within the meaning of the Medical Act 1983 and has the necessary qualifications or experience for the purpose of treating drug addiction (the "drug treatment practitioner"). A drug treatment practitioner may work within the prison under the general supervision of the medical officer.

(2) The medical officer or the drug treatment practitioner shall make arrangements for the provision of treatment to any prisoner being addicted to any controlled drug,[258] with a view to the reduction or elimination of the offender's addiction to drugs.

(3) For the purposes of this rule, a prisoner shall be regarded as being addicted to a drug if, and only if, he has as a result of repeated administration become so dependent upon the drug that he has an overpowering desire for the administration to be continued.[259]

4.6 This amendment would confine the provision of drug treatments to prisoners who were addicted to drugs (as defined).

5. **"We recommend that an evaluated pilot programme of safe injecting houses for heroin users be established without delay and that if, as we expect, this is successful, the programme be extended across the country" (paragraph 186).**

5.1 This requires an amendment to section 8 of the MDA 1971, which creates an offence for occupiers who knowingly permit or suffer various drug-related activities on their premises. This recommendation is dealt with in more detail at paragraph 9 below.

6. **"We recommend that a pilot along the lines of the Swiss or Dutch model, is conducted in the UK. Should such a pilot generate the positive results which one would expect from the Dutch and Swiss experience, we recommend that such a system should supersede the little-used "British system" of licencing" (paragraph 190).**

"We recommend that the Government commission a further trial to look at expanding prescription of diamorphine to addicts who have not yet or are not currently accessing any treatment, despite having a long history of heroin addiction" (paragraph 194).

6.1 The Misuse of Drugs (Supply to Addicts) Regulations 1997[260] prohibit doctors from supplying or prescribing certain drugs (cocaine, diamorphine and dipipanone) to addicts, except under licence of the Secretary of State (or for the purpose of treating organic disease or injury).

6.2 It would appear that any pilot programme would need to be exempted from these regulations.

7. **"We recommend that training in substance misuse be embedded in the undergraduate medical curriculum and postgraduate General Practice curriculum, as a problem which will arise with increasing frequency over the careers of all prospective doctors training today" (paragraph 218).**

"We would also expect the British Medical Association and the Royal College of General Practice to take a rather greater interest in this area than is evident so far. In particular we would expect these organisations to use their considerable influence to ensure that treatment of drug misuse is included in the medical curricula." (paragraph 219).

7.1 The Education Committee of the General Medical Council is responsible for overseeing the content of the undergraduate medical curricula. The Privy Council has certain default powers to act where the Education Committee does not.

7.2 An individual can only practice medicine if he is a fully registered medical practitioner (or provisionally, with limited registration). Entitlement to register is conditional on (a) holding one or more primary United Kingdom qualifications specified in the Medical Act 1983; (b) passing a qualifying examination; and (c) satisfying certain specified requirements as to post-qualification experience.[261] Accordingly, training for drug misuse may either be included on the curricula for qualification or, alternatively, it may form part of the post-qualification experience.

7.3 The Medical Act 1983 provides that:

— The General Medical Council's Education Committee shall have "the general function of promoting high standards of medical education and co-ordinating all stages of medical education".[262]

— For this purpose, the Education Committee must (among other things) "determine the extent of the knowledge and skill which is to be required for the granting of primary United Kingdom qualifications and secure that the instruction given in universities in the United

Kingdom to persons studying for such qualifications is sufficient to equip them with knowledge and skill of that extent.[263] Accordingly, the Education Committee has a duty to determine the knowledge and skill requirements of medical qualifications. It may decide that drug misuse ought to be required as part of the medical qualification.

— If it appeared to the Privy Council that the Education Committee ought to determine that drug misuse be a requirement of the medical qualification, but had fai' to do so, then the Privy Council may direct the Committee to do so.[264] If the Education Committee failed to comply with such directions, the Privy Council could effectively step into the shoes of the Education Committee and exercise the power itself.[265] This po"er may be exercised by any two or more of the lords and others of the Privy Council.[266]

8. "We recommend that the Government review Section 9A of the Misuse of Drugs Act, with a view to repealing it, to allow for the provision of drugs paraphernalia which reduces the harm caused by drugs" (paragraph 252).

8.1 The purpose of section 9A was to prohibit the sale of drug kits, which were previously available on the open market.[267] Repealing the section would allow the re-emergence of the legitimate sale of drug kits. There is an argument that the ready availability of such kits might encourage, or otherwise legitimise, drug use. The section could be amended, however, to ensure that paraphernalia is available to addicts for the purposes of harm reduction.

8.2 At least two options are available. First, the section could be amended to exempt specific articles of paraphernalia, which are known to reduce harm (for example, witnesses have mentioned citric acid in particular). These could be exempted in the same way that hypodermic needles are excluded (see section 9A(2) of the Act below). Secondly, the section could be amended to permit supply by specified persons (such as doctors, nurses, pharmacists etc). This would prevent the commercial sale of drug kits on the open market, whilst allowing supply by *bona fides* treatment providers.

8.3 Section 9A (at present) provides:

"(1) A person who supplies or offers to supply any article which may be used or adapted to be used (whether by itself or in combination with another article or other articles) in the administration by any person of a controlled drug to himself or another, believing that the article (or the article as adapted) is to be so used in circumstances where the administration is unlawful, is guilty of an offence.

(2) It is not an offence under subsection (1) above to supply or offer to supply a hypodermic syringe, or any part of one.

(3) A person who supplies or offers to supply any article which may be used to prepare a controlled drug for administration by any person to himself or another believing that the article is to be so used in circumstances where the administration is unlawful is guilty of an offence.

(4) For the purposes of this section, any administration of a controlled drug is unlawful except—

(a) the administration by any person of a controlled drug to another in circumstances where the administration of the drug is not unlawful under section 4(1) of this Act, or

(b) the administration by any person of a controlled drug to himself in circumstances where having the controlled drug in his possession is not unlawful under section 5(1) of this Act.

(5) In this section, references to administration by any person of a controlled drug to himself include a reference to his administering it to himself with the assistance of another."

9. **"We recommend that Section 8 of the Misuse of Drugs Act be amended to ensure that drugs agencies can conduct harm reduction work and provide safe injecting areas for users without fear of being prosecuted" (paragraph 257).**

9.1 Section 8 was only recently amended by the Criminal Justice and Police Act 2001 (s. 38), which extended its application quite significantly (although the amendment is not yet in force).[268] The purpose of the extension was to cover so-called "crack houses", although it would appear to extend more widely than that.[269]

9.2 Section 8 (as amended) provides:

A person commits an offence if, being an occupier or concerned in the management of premises, he knowingly permits or suffers any of the following activities to take place on those premises, that is to say—

(a) producing or attempting to produce a controlled drug in contravention of section 4(1) of this Act;

(b) supplying or attempting to supply a controlled drug to another in contravention of section 4(1) of this Act, or offering to supply a controlled drug to another in contravention of section 4(1);

(c) preparing opium for smoking;

(d) smoking cannabis, cannabis resin or prepared opium;

[(d) administering or using a controlled drug which is unlawfully in any person's possession at or immediately before the time when it is administered or used.]

NB: the new paragraph (d) (substituted by the Criminal Justice and Police Act 2001, s. 38) is underlined and in square brackets. This will replace the italicised paragraph (d), when it

comes into force.

9.3 There are two options for implementation of the Committee's recommendations. The first is draft an exclusion clause, which applied specifically to a defined group (eg drugs agencies), or for a defined purpose (eg to provide safe injecting areas). The second, and perhaps simpler, option is to draft an exemption which permitted a licencing system, whereby the Secretary of State would authorise specific harm reduction activities to take place on specified premises.

9.4 Adopting the second option, section 8 could be amended as follows:

(1) A person commits an offence if, being an occupier or concerned in the management of premises, he knowingly permits or suffers any of the following activities to take place on those premises, that is to say—

(a) producing or attempting to produce a controlled drug in contravention of section 4(1) of this Act;

(b) supplying or attempting to supply a controlled drug to another in contravention of section 4(1) of this Act, or offering to supply a controlled drug to another in contravention of section 4(1);

(c) preparing opium for smoking;

(d) administering or using a controlled drug which is unlawfully in any person's possession at or immediately before the time when it is administered or used.

(2) It shall not be unlawful for any person mentioned in sub-section (1) to knowingly permit or suffer any activity which is authorised in accordance with the terms of a licence, issued by the Secretary of State, and in compliance with any conditions attached to the licence."

10. "**We recommend that the Home Office and the Department of Health urgently review the current legal framework on the dispensation of controlled drugs by community pharmacists in consultation with the Royal Pharmaceutical Society" (paragraph 260).**

10.1 This would require a review of the Misuse of Drugs Regulations 1985[270] and, in particular, Regulations 15 (form of prescriptions) and 16 (provisions to supply on prescription).

11. "We recommend that Drugs Abstinence Orders be amended to carry the requirement of access to treatment" (paragraph 264).

11.1 This recommendation requires amendment to those provisions of the Powers of Criminal Courts (Sentencing) Act 2000, which deal with Drug Abstinence Orders.

11.2 Drug Abstinence Orders may only be made in respect of adult offenders (18 and over) where, in the opinion of the Court, the offender is dependent on, or has a propensity to misuse specified Class A drugs and he has either been convicted of a "trigger" offence,[271] or the court feels that his Class A drug misuse caused or contributed to the offence.

11.3 Such orders must be made for a specified period not less than 6 months and not exceeding three years.[272]

11.4 At present, Drug Abstinence Orders must include only two requirements. First, that the offender abstain from misusing specified Class A drugs and, secondly, to undertake a drug test on instruction.[273] Accordingly, there is no express power to make provision for treatment within the order.

11.5 By contrast, Drug Treatment and Testing Orders must include a requirement that the offender submit to treatment, in addition to testing.[274] Accordingly, treatment under a DTTO is compulsory.

11.6 Drug Abstinence Orders could be amended to require the Court to make an order which includes provision for access to appropriate treatment, through the following amendment to section 58A of the Powers of Criminal Courts (Sentencing) Act 2000. After sub-paragraph (4) insert:

"(4A) The drug abstinence order shall provide that, for the duration of the order, the offender shall have access to an appropriate course of treatment by or under the direction of a specified person having the necessary qualifications or experience, with a view to the reduction or elimination of the offender's dependency on or propensity to misuse drugs."

243 The offence covers "supplying or offering to supply a controlled drug or being concerned in the doing of either activity by another". MDA 1971, s. 4(3). Back

244 R v. Moore [1979] Crim. L. R. 789. Back

245 On indictment. Back

246 1985 Regulations, Reg. 5. Back

247 Cannabis falls within Schedule 1 of the 1985 Regulations, to which the general exceptions do not apply. There are, however, two specific exceptions applicable to cannabis. The first permits the smoking of cannabis or cannabis resin for research purposes, in premises approved by the Secretary of State (1985 Regulations, Reg.13), and the second permits the cultivation of cannabis plants under licence issued by the Secretary of State (MDA 1971, s. 6 and 1985 Regulations, Reg.12). Back

248 For example, doctors and dentists (or any person acting in accordance with the directions of a doctor or dentist) are permitted to administer to a patient any drug specified in Schedule 2, 3, or 4 and Any person can administer to any other person a drug specified in Schedule 5 (1985 Regulations, Reg.7). Back

249 MDA 1971, s. 2(2). Back

250 Part I of Schedule 2, MDA 1971 contains the list of Class A drugs. Esctasy (or "methylenedioxymethylamphetamine", MDMA) is not specifically mentioned in Schedule 2, but it is a Class A controlled drug as being a compound falling within paragraph 1(c) of Part of I of Schedule 2 (Archbold: criminal pleading, evidence and practice 2000, para. 26-15). Back

251 Part II of Schedule 2, MDA 1971. Back

252 Part III of Schedule 2, MDA 1971. Back

253 Prison Act 1952, s. 22(2). Back

254 Prison Act 1952, s. 7(4) and Medicine Act 1983, ss.55 and 56, Sched. 6, para. 11(2); Prison Act 1952, s. 7(1); s. 47; Prison Rules 1999 (S.I. 1999, No.728), Reg. 20(1). Back

255 Regulations 20 and 21 of the Prison Rules 1999, make various general provisions for the medical attention of prisoners within the prison estate. Back

256 The Prison Act 1952 provides for the compulsory testing of prisoners for drugs (section 16A) and alcohol (section 16B). However, the Act makes no express provision for treatment of drug addicts (or, indeed, alcoholics). Back

257 *R. v. Secretary of State for the Home Department, ex p. John Shaw,* 10 February 2000, QBD. Back

258 "Controlled drug" is already defined in the Prison Rules as "any drug which is a controlled drug for the purposes of the Misuse of Drugs Act 1971", Rule 2(1). Back

259 This replicates the definition of drug addict, as defined in the Misuse of Drugs (Supply to Addicts) Regulations 1997, S.I. 1997, No. 1001. Back

260 S.I. 1997, No. 1001. Back

261 Medical Act 1983, s. 3(1)(a). Section 3(1)(b) provides that EEA nationals are entitled to be registered if they hold one or more primary European qualifications. Back

262 Medical Act 1983, s. 5(1). Back

263 Medical Act 1983, s. 5(2)(a). Back

264 Medical Act 1983, s. 50(1)(b). Back

265 Medical Act 1983, s. 50(2), (3). Back

266 Medical Act 1983, s. 52. Back

267 Rudi Forston, *Misuse of Drugs and Drug Trafficking Offences*, (Sweet and Maxwell, 2002), para. 7-35. Back

268 Date in force: to be appointed; Criminal Justice and Police Act 2001, s. 138(2). Back

269 Rudi Forston, *Misuse of Drugs and Drug Trafficking Offences*, (Sweet and Maxwell, 2002), para. 7-01. Back

270 S.I. 1985, No.2066 (as amended). Back

271 Schedule 6 of the Criminal Justice and Courts Act 2000, sets out a list of offences which are "trigger" offences. Back

272 Powers of Criminal Courts (Sentencing) Act 2000, s. 58A(7), as inserted by Criminal Justice and Courts Act 2000, s. 47. Back

273 Powers of Criminal Courts (Sentencing) Act 2000, s. 58A(1). Back

274 Powers of Criminal Courts (Sentencing) Act 2000, s. 52-8. Back

HOUSE JUDICIARY COMMITTEE
12 April 2005

WITNESS LIST

- BILL PARKER
  - Spokesman for Alaskans for Marijuana Regulation and Control
- WES MacLEOD-BALL
  - Director, Alaska Civil Liberties Union
- JACK COLE
  - Director, Law Enforcement Against Prohibition and retired narcotics police officer
- MITCH EARLEYWINE, Ph.D.
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- SCOTT BATES
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- GREGORY CARTER, M.D.
  - Professor of Medicine, University of Washington, Seattle
- TIM HINTERBERGER, Ph.D.
  - Associate Professor of Biomedicine, University of Alaska, Anchorage
- KELLY DREW, Ph.D.
  - Associate Pofessor of Chemistry and Biochemistry, University of Alaska, Fairbanks

- JIM WELCH
  - Medical Marijuana patient, Eagle River

- DEBBIE SOULE
  - Medical Marijuana patient, Wasilla

WRITTEN TESTIMONY

- LESLIE IVERSON
  - Visiting Professor of Pharmacology, University of Oxford, England

- ROBERT MELAMEDE, Ph.D.
  - Professor of Biology, University of Colorado at Colorado Springs

- LESTER GRINSPOON, M.D.
  - Associate Professor of Psychiatry, Harvard Medical School

Testimony to House Judiciary Committee
April 12, 2005

My name is Bill Parker. I am a former member of the Alaska House of Representatives, and I retired from state service as Deputy Commissioner of Corrections. Today I speak for Alaskans for Marijuana Regulation and Control.

H.B.96 attempts to recriminalize marijuana for adults in Alaska, in violation of the Alaska Constitution.

In 1975, in a landmark case known as Ravin, the Alaska Supreme Court ruled the privacy clause of the Alaska Constitution protects possession of a small amount of marijuana by adult Alaskans in their own homes for their own use. In 1975, the Alaska Legislature changed the statutes to decriminalize marijuana in Alaska.

Various attempts have been made in the 30 years since to attack this de-criminalization, both legally and politically.

An initiative in 1990 attempted to re-criminalize marijuana in Alaska, but initiatives change statutes, not the Constitution, and the initiative had no effect.

Many legal attempts have been made to test the constitutionality in the courts, all unsuccessful. The latest was last fall when the Alaska Supreme Court declined to take up the Appellate Court's latest ruling upholding Ravin.

H.B.96 is another attempt to attack the constitutional issue in a legal and political manner.

If H.B.96 passes with these findings, they will be admissible in court, and the administration will have new arguments that marijuana is much more potent and dangerous than in 1975, so much so that it is almost a different substance.

That is why the findings section of this bill is important. The findings are flawed. Expert witnesses from Alaska and Outside are going to explain those flaws today.

They will discuss the complex medical and sociological issues that other government panels have studied at length.

- The Shafer Commission's report to President Nixon in 1972, "Marijuana: Signal of Misunderstanding."
- The National Research Council's 1982 report, "An Analysis of Marijuana Policy."
- The Institute of Medicine's 1999 report, "Marijuana and Medicine: Assessing the Scientific Base."
- The 2002 report of the British Advisory Council on the misuse of drugs, "The Classification of Cannabis."
- The House of Commons Home Affairs Committee 2002 study, "The Government's Drug Policy: Is It Working?"
- Jamaica's 2001 National Commission on Ganja came to the same conclusion;

  Marijuana is not so harmful that the penalties for possession need to be increased.

H.B.96 would take Alaska in the opposite and wrong direction.

The State's witnesses could not be called objective observers. Those directly involved in implementing an administration's policies cannot evaluate those policies impartially. Evaluators should be independent academics.

The testimony today will show that the time schedule alone for H.B.96 is inadequate to evaluate marijuana in Alaska. We have submitted, in writing, the findings of experts in their fields who determine marijuana to be relatively harmless compared to alcohol. Each finding must be examined individually as the other commissions and committees have done with scientific integrity.

Here is a quick review of the evidence you will hear today:

Experts will point out the differences between scientific research and pseudo-science, the confusion between correlation and causation.

The administration's assertions about increased potency of marijuana are inaccurate and misleading in several respects:

- There are serious questions about the actual potency of marijuana today and yesterday. There is no reliable way to measure potency.
- There is no proof that marijuana is more addictive or dangerous than previously.
- In fact, more potent marijuana would result in people using less, because of the effect of autotitration.

The administration's treatment of statistics is misleading because most of their conclusions are court-ordered, not a clinical diagnosis of marijuana addiction or even a self-referral. Most had to choose between treatment or incarceration. Most chose treatment.

The rate of marijuana use among minors in Alaska is no higher today than it was in 1975. In fact, according to the government's own statistics, overall use in grades 6 through 12 in Alaska schools is lower now after 30 years of decriminalization.

Marijuana use by minors has not been shown to cause psychosis later in life.

Marijuana use does not induce violent behavior, rape, or child abuse.

The emergency room data used to show that marijuana is more dangerous today is not conclusive. The relation to marijuana in patients is so widely construed as to be meaningless. And the administration has overstated and misinterpreted the evidence of marijuana's link to lung cancer, juvenile crime, and the possibility of addiction and dependence.

The weight of scientific evidence available today discredits the old 'gateway drug' theory.

There are laws already in place to prohibit driving while impaired by alcohol or marijuana. These laws will remain in effect.

H.B.96 would have a bad effect on medical marijuana patients by jeopardizing their ability to possess marijuana if adult use of marijuana in the home is criminalized.

If the administration's aim is to promote the public health and welfare, re-criminalizing personal, adult use of marijuana in the home won't do it. Re-criminalization will only feed the black market and increase the social costs that flow from it.

And the spontaneous response by the citizen witnesses in the capitol and that the legislative information offices (LIOs) across the state show the Alaska public understands all this.

Science shows marijuana causes far less harm to the public health and welfare than alcohol or tobacco. And that's as true today as it was in 1975.

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Testimony of Michael W. Macleod-Ball, Executive Director, before the House Judiciary Committee Regarding HR 96 (marijuana legislation)

Thank you Chairman Seekins for this opportunity to address the committee. I'd also like to thank your staff for doing their best to keep us up to date on schedules and the like and for keeping their good humor despite their many competing interests. My name is Michael Macleod-Ball and I'm the executive director of the Alaska Civil Liberties Union.

I have submitted a written copy of my testimony before the Senate HESS committee for your consideration. Today, I'd like to address several other points that we believe to be important for this committee to consider.

History of legislation and case law

First, it's important to fully understand the history – the context in which this debate exists. The Ravin decision of 1975 has been much maligned as the decision that legalized marijuana in Alaska. That reputation is unfair and only part of the story. Ravin was much more about defining the scope of privacy than it was about legalizing marijuana. The privacy amendment to the Alaska Constitution had only recently been enacted at the time of the Ravin decision.

At its core, Ravin stood for the proposition that there are zones of privacy and if the government makes a law invading that privacy zone, it needs to be for a compelling reason. In that sense, the privacy right is just like any other fundamental right – free speech, right to worship – restrictive legislation needs a strong justification....something more than the basis for legislative action that doesn't infringe upon a fundamental right. You wouldn't enact a law barring all public discussion of whether marijuana is harmful. You wouldn't enact a law barring all Presbyterians from worshipping. Similarly, you wouldn't enact a law restricting an individual's right to be left alone.

Ravin declared that there is a protected zone of privacy in one's home. Ravin also stands for the proposition that an activity that doesn't harm someone else is due greater deference. In evaluating marijuana laws in light of the privacy amendment, the Ravin court said that the risks of marijuana were not so great as to justify state infringement of the zone of privacy.

It's important to note what Ravin did not do. It did not bar legislation related to driving under the influence. It did not bar legislation aimed at prohibiting commercial cultivation. It did not bar legislation prohibiting sales of marijuana. It did not bar legislation prohibiting use by minors. And no court decision since then has done any of

these things. So – all the talk by the administration about marijuana as a cash crop, needing to bar sales to kids, etc., is irrelevant to the issues before you in this bill. Such things are illegal now and will be illegal in the future.

After the Ravin decision, this body adopted legislation in effect codifying its terms. That legislation was the origination of the four ounce threshold for personal possession in the home, not the court decision. In 1990, a referendum attempted to recriminalize marijuana. Just last year, an appeals court overturned that decision. Once again, the decision was not about marijuana per se, but rather about the procedural means by which a constitutional right can be restricted. A constitutional amendment requires a 2/3 vote of the legislature plus the affirmative vote of the populace. It was logical that the court would not permit the dilution of a duly adopted constitutional provision based solely on a referendum. To do otherwise would have discounted the right of the legislature to initiate such constitutional provisions.

Because the referendum was not a valid procedure to change the constitution, the court was left to determine the state of the law with respect to marijuana – and it was clear that the law in effect immediately prior to the referendum would control. That law included the four ounce limit for personal use and possession which this law seeks once again to overturn.

Some risk isn't enough

As noted previously, the Ravin court acknowledged that marijuana had some risks associated with it. It considered a wealth of evidence, more in some ways than this panel has, and concluded that there was debate about the risks of marijuana, some evidence suggested greater risk than other evidence. That risk, however, was insufficient to justify government intrusion into the privacy of the home. What's more – the court even anticipated the presence of children in the home and said that even with kids in the home there was insufficient threat to public safety or welfare to justify a government invasion of the privacy of the home.

Findings should match the facts and the state's claims are exaggerated

Taking it all together, the obvious question is whether there is any way the legislature can act to restrict marijuana use and possession in the home. We believe the answer is 'no' given the current state of the science and the nature of the right being infringed.

The risks associated with the private possession of marijuana for personal use in the home simply haven't been demonstrated to exist – if they even exist to any greater degree than they did in the 1970's. In this bill, the findings overstate the known risks of marijuana in the hope that the courts will defer to these findings and agree that the stated risks justify restriction. To counter those exaggerations, you will hear testimony from internationally renowned experts who will tell you that the risks of marijuana are not substantially greater than 30 years ago. You will hear them say that the findings do not

reflect the best science. You will hear them say that the administration's testimony exaggerates or misleads or takes scientific conclusion out of context.

Compare this to the administration's overstatements: At a hearing last week, they asserted that kids get their pot at home from family. But if you look at the actual study they relied on to make that statement, you'll see that kids mostly get their pot from friends. Only a small fraction get it from family members. And there is no indication that when they get pot from the home, they're getting it from adult family members. The materials submitted to Senate HESS and the testimony provided there made the alarming claim that 15% of rape suspects have smoked marijuana in the hours before the arrests. But if you look at the study from which that claim is drawn, you'll find that over 70% of those same suspects have consumed alcohol in the hours before arrest. And you'll find there is no indication whether the marijuana smokers also drank alcohol...and you'll find that the authors of the study were so concerned with the alcohol correlation that they provided much additional follow on information about alcohol use. And you'll find they deemed the marijuana link minor, perhaps trivial, in scientific terms...and deemed it unworthy of more detailed review. Those are just two examples of the administration's overstatements – if you had more time to look at their information, you might just find more.

If you want to be honest with the Alaskan public about this by adopting accurate findings, you have to admit that the weight of the evidence does not support the findings and does not justify a restriction on private possession of small amounts of marijuana for personal use in the home. The evidence may suggest driving while under marijuana's influence should be banned – but it already is and this legislation doesn't change that. It may suggest that commercial cultivation should be banned – but it already is and this legislation doesn't change that. This legislation does ban possession of any amount, no matter how small, even for private consumption in the home – and the findings are a smokescreen, without any support relevant to that restriction.

Findings will be subject to judicial review

The end result of this will be another court challenge...and the court this time will be left in the position not of defining the privacy right and not of explaining the proper way to amend the constitution, but rather of revealing the fallacy of these proposed findings. When a fundamental right is involved, the court will not simply defer to legislative findings. Clarence Thomas, when on the appellate court, said that simply saying so cannot make black into white or slavery into freedom. In this case, simply saying there is justification to invade the privacy of the home won't make it so. If this legislature doesn't wish to take the time to evaluate all the science methodically and with impartiality, the courts will certainly do so. And they'll find what other eminent and impartial panels have found – that marijuana has some risks, but far fewer than alcohol, tobacco, and other substances.

Criminalization doesn't help – it just creates more criminals and poverty

What should this legislature do? If, as we suspect, there is a predisposition to ban marijuana in public and in private, then a constitutional amendment is the only way to go. We'd oppose such a movement, but there would be no doubt of the validity of the process, if successful. Significantly, nothing has been offered to show that criminalization works. The administration has decried the increase in usage rates – and impliedly blamed the court's privacy rulings. But as discussed earlier, we had effective prohibition for close to 15 years from the referendum until the decision negating that vote. If the administration's claims of increased usage are true, they occurred in a climate of perceived prohibition. If the concern of this legislature is really usage rates, why not focus on things that have been shown to work for other substances. Focus on education, focus on prevention.

At the very least, focus on all of the science presented to you today – if you look at it with an open mind, we believe you will be unable in good conscience to approve the findings you have before you in support of a restriction on a fundamental right.

Thanks for your attention and I'll be happy to answer questions.

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My name is Jack Cole. I retired as a Detective Lieutenant after a 26-year career with the New Jersey State Police. For fourteen of those years I worked as an undercover narcotics officer. My investigations spanned the spectrum of possible cases, from street drug users to international "billion-dollar" drug trafficking organizations.

I am also the executive director of LEAP or Law Enforcement Against Prohibition. LEAP was founded by five former cops to give voice to members of law enforcement who believe the war against drugs is not only a dismal failure but a terribly destructive policy. In the 2 ½ years of our existence we have grown to over 2,000 members and we are no longer just cops—now we are police, judges, prosecutors, prison wardens—we even have retired DEA officers who help make up our bureau of 85 speakers.

Passing bills that raise criminal penalties and assess harsher sentences for non-violent drug offenses is very poor public policy.

1. From 1975 to 1990, Alaska had 15 years of decriminalized adult use in the privacy of the home (based on the Alaska Supreme Court opinion in Ravin);
2. From 1990 to 2003 AK had a return to full de facto prohibition (based on an initiative that purported to recriminalize marijuana); and
3. From 2003 to now, marijuana in the home was decriminalized again (based on the Alaska Court of Appeals decision in November).
4. According to Alaska's own statistics overall use among children in grades 6 to 12 has **decreased** since 1975, while across the United States that rate has

increased (30 % for 12th graders, 65% for 10th graders, and 88% for 8th graders).

For 35 years, with a budget of over ½ trillion dollars, the United States has fought the war on drugs with ever harsher policies. We have arrested 1.6 million people for nonviolent drug offenses—fully half of the arrests were for marijuana violations. Two million two-hundred-thousand are in prison in the US, far more per capita than any country in the world. And what do we have to show for all those ruined lives and misspent money: Today drugs are cheaper, more potent and far easier to get than they were in the 1970 when I started buying them undercover. I believe that is the very essence of a failed public policy.

Nearly a thousand young people went to jail as a direct result of what I did as an undercover narcotics agent.

I can't say how many of those children would have gone on to become valuable citizens had I not intervened, but I'm sure the number would be huge.

Think of all the folks you know who used an illegal drug as a youngster, then put the drugs behind them and went on to live productive lives. Many are now members of our government. George Bush, Bill Clinton, Al Gore, Dan Quail, Newt Gingrich. The line is too long to enumerate but they all had two things in common, they all used illegal drugs, then quit, and when they arrived at a position of power they all got selective amnesia so now they say police should arrest young people and destroy their life prospects for doing exactly what they did.

We have a saying at LEAP: You can get over an addiction, but you will never get over a conviction. A conviction will follow you every day for the rest of your life—every time you apply for a job it is over your head like an ugly cloud.

There are many unintended consequences of the war on drugs. When you prohibit a drug, even the worst drug, you don't cause less people to imbibe. All you do is create an underground market that is instantly filled with criminals.

Worse, you create an artificially inflated value for that drug that can be up to 17,000 percent of the initial investment—making marijuana worth more than gold and heroin worth more than uranium. I would suggest that whole armies of police can not arrested our way out of drug problems when prohibition creates such obscene profit motives for prospective dealers. Every time I arrested a drug dealer I was simply creating a job opening.

For those of you who think that by backing this bill you are in the mainstream of public thinking, let me say that I believe that is not true: In the last year LEAP started attending national and international law enforcement conferences. We kept track of the opinions of the nearly 1,200 officials we spoke to on a one-to-one level. Even we were surprised to find that after we spoke with them, 6% wanted to continue the war on drugs, 14% were undecided, but a whopping 80% agreed with us that we must end prohibition. The most interesting thing about that 80% was only a very small number of them realized that any other law enforcement officer felt as they did. Peer pressure to not appear soft on drugs or soft on crime is so strong that they don't talk to each other about their beliefs.

Please, don't pass bills that tie up more police hours in projects that do nothing to lessen the incidence of death, disease, crime, and drug addiction—let police get back to protecting us from violent crime. We will all be much better off.

STATEMENT REGARDING S.B. 74 AND H.B. 96

MITCH EARLEYWINE, PH.D., Associate Professor of Psychology, University of Southern California; author, *Understanding Marijuana* (Oxford University Press, 2002)

Like the language in S.B. 74 and H.B. 96, many media reports suggest that cannabis (marijuana) has increased in potency quite dramatically in recent years. These reports have generated considerable debate, and in fact the magnitude of the increase is difficult to document and is most likely greatly exaggerated. In addition, the assumption -- clearly implied in the bills' findings -- that increased marijuana potency translates into greater danger from the drug is untrue.

Reports of a stronger drug actually began over 30 years ago. By the middle of the 1980s, some authors suggested that marijuana's potency had increased by a factor of 100 (MacDonald, 1984). These claims clearly suffered from exaggeration or misinformation. Other arguments about increased potency arose from the University of Mississippi's Potency Monitoring Project, a program that reports the average THC content of cannabis taken in drug arrests. Estimates were extremely low in the 1970s, sometimes below 1%. But these figures are inherently suspect, because cannabis with this little THC has no impact on subjective experience -- that is, it does not produce a "high." The idea that a drug with no effects would increase dramatically in popularity over the years, as marijuana clearly did during the 1960s and 1970s, makes little sense. Thus, these estimates from the 1970s were probably inaccurate reflections of the amount of THC in marijuana available at the time.

Investigators hypothesize that the data from the Potency Monitoring Project underestimate the true amount of THC in marijuana from the 1970s. First, the estimates were based on very few samples of seized cannabis. In some years there were no more than 50 samples to analyze (PMP, 1974-1996). In addition, police may have stored the marijuana in hot lockers that allowed the THC to degrade rapidly (Mikuriya & Aldrich, 1988). Despite the small samples and poor storage, the average THC content in 1976 was 2% (ElSohly, Holley, & Turner, 1984).

An alternative source of potency information, an independent laboratory in California, analyzed many more samples than the Potency Monitoring Project. This laboratory found a large range in THC concentration. In 1973 this laboratory tested over 100 samples and found that marijuana had an average of THC content of 1.6 % (Ratcliffe, 1974). Later analyses ranged up to almost 8% THC (Perry, 1977). Thus, the idea that all, or even most, cannabis of the 1970s had less than 1% THC seems unlikely. Ratcliffe's (1974) estimate of an average potency level of 1.6% may be conservative but credible; the 1976 estimate of 2% may be closer to the truth. And clearly, marijuana much stronger than 2% was available in the mid-1970s

Potency data from the 1980s through the middle of the 1990s suggest that THC content continued to vary dramatically from strain to strain and sample to sample. With improved storage techniques and much larger samples, the Potency Monitoring Project found THC concentrations varied from 2% to almost 4%. Average concentrations approached 4% THC in 1984, 1988, 1990, and 1991 (PMP, 1974-1994). Trends in the rest of the 1990s showed comparable THC content, with a peak around 4.5% THC in 1997. Other cannabinoids like cannabinol and cannabidiol have not increased in

concentration over the years (ElSohly, et al., 2000). Thus, claims of 1000% (Cohen, 1986) or 10,000% (MacDonald, 1984) increases in marijuana potency are clearly inaccurate. A threefold elevation from approximately 1.5% in the early 1970s to 4.5% in the late 1990s may be closer to the truth. A simple doubling from an average of 2% to an average of 4% also seems the most plausible.

Although many media reports warn that increased potency translates into greater danger, scientific data suggest otherwise. Recent alarms about increased mentions of marijuana in emergency rooms have received a great deal of attention, with many authors positing that stronger cannabis has created more emergency room visits. In fact, the data that allegedly support these allegations are extremely questionable. Emergency rooms have no estimates of the strength of the cannabis used by those who appear for treatment. The purported increase in reports of cannabis use in emergency rooms likely stem from improved assessments by emergency room personnel or a gradual decrease in the stigma associated with use of the plant, not from ill-effects caused by marijuana use. Previous work suggests that emergency room assessments of drug use were wildly inaccurate (Roberts, 1996). Because marijuana appears incapable of causing fatal overdoses, it is implausible that the reported increase in ER "mentions" of marijuana is due to life- or health-threatening reactions caused by cannabis.

Marijuana with greater amounts of THC is probably **less** hazardous than weaker cannabis. First of all, acute administration of the drug is essentially non-toxic. No one has ever died from THC poisoning. Smoking enough cannabis to ingest a lethal amount of THC may be physically impossible. Estimates of a fatal dose of any drug arise from some rather gruesome animal research. Different groups of animals receive large amounts of a

drug until a particular dosage kills 50% of them. Researchers refer to the dose that is lethal for 50% of the animals as the LD 50. Investigators then extrapolate from these data to estimate a lethal dose for humans. The LD 50 for THC is approximately 125 milligrams for every kilogram of body weight (Nahas, 1986). Thus, a 160 pound (approximately 73 kilogram) person would need 9,125 milligrams of THC to have a 50% chance of dying. A typical marijuana cigarette weighs one gram and contains roughly 20 milligrams of THC, suggesting that a lethal overdose would require smoking roughly 450 joints in a brief period . Furthermore, at least 50% of the THC is destroyed in the burning process or lost to sidestream smoke. Given this loss, 900 joints would be a more appropriate estimate of a fatal amount (Doweiko, 1999). The 900 joints would weigh roughly 2 pounds. Although experienced users tell many exaggerated tales about smoking large amounts of cannabis, this dosage exceeds 100 times the quantity typically consumed by the heaviest users.

Marijuana with larger percentages of THC actually has benefits. Stronger cannabis leads to smoking smaller amounts. Smoking smaller quantities could provide some protection against the health problems normally associated with inhaling smoke. Smokers may take smaller, shorter puffs when using more potent marijuana (Heishman, Stitzer, & Yingling, 1989). Smoking less may decrease the amount of tars and noxious gases inhaled, limiting the risk for mouth, throat, and lung damage (Matthias, et al., 1997). Obviously, avoiding smoke completely would eliminate these problems. Thus, eating or vaporizing cannabis products may have fewer negative consequences than smoking them.

For the reasons outlined above, I believe it is inappropriate to base penalties for marijuana-related offenses on purported dangers related to an increase in cannabis potency.

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STATEMENT REGARDING ALASKA SB 74 AND HB 96

Scott Bates, Economist
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Hello, my name is Scott Bates. I work for Boreal Economic Analysis & Research in Fairbanks. I have a Master of Science in Economics from the University of Alaska Fairbanks. I have worked on various projects as a research analyst over the last few years, and I am here to speak to you because I was involved in preparing a report called The Economic Implications of Marijuana Legalization in Alaska, prior to the vote on Ballot Measure 2 in 2004.

As detailed in that report, the costs to the State of Alaska of prohibiting marijuana include the actual costs of policing, prosecuting and corrections, as well as some indirect social costs. In total, we estimated that direct costs to the justice system are on the order of $16 million per year to prohibit marijuana. This was based on information gathered from the State, as well as data collected from the US DOJ, for State expenditures from 1997 to 2002. Social costs were estimated to amount to well over $7 million per year, including lost economic output, social services, and secondary offenses which occur as a result of probation violations and such. Based on our estimates from the report last year, I have estimated the additional costs that will result from passage of this bill.

Of the $16 million mentioned above, about $1.5 million were for law enforcement costs of marijuana arrests. This estimate was based on the fact that roughly 3.5% of all arrests in Alaska are for marijuana. Nationally the rate of marijuana arrests as a proportion of total arrests is approximately 5%.

It is reasonable to assume that if marijuana is recriminalized in Alaska, the proportion of marijuana arrests compared to total arrests will rise to become similar to the US average. In this case the costs of law enforcement would rise by at least $1 million, which is calculated by taking 1.5% of the average $68.1 million law enforcement budget for the last few years.

If committee members have looked at the fiscal notes that accompany this bill, they might have been surprised to see that the Department of Public Safety claims that "passage of this act will have no fiscal impact" on policing costs, because "The potential increase in the number of arrests for violations can be handled by available staff." More than one member of the Senate HESS committee found this difficult to believe, and I don't expect you to believe it either.

The rise in marijuana cases does not mean a similar decrease in other crimes. So if we consider the average $68 million budget for law enforcement, we have to ask, what will they give up in order to spend another million dollars on marijuana arrests? Since I am an economist, you know that the next words from me must be "opportunity costs." When we spend resources on a specific activity, we give up the opportunity to spend those resources on any other activities. Unless the law enforcement folks come to you and ask for more money, they are going have to decide which crimes are more important to

respond to—marijuana possession or other offenses.

Of all the components of the justice system affected by marijuana prohibition, policing is the *least* costly. The court system had average expenditures of $129.4 million over the last few years. Out of this total, we calculated that marijuana cases account for about $9.45 million per year on average. Clearly an increase in arrests will mean an increase in the court's case load. If the case load increase comparably to the arrest rate, the court system could have additional costs of about $4 million, bringing the total to $13.46 million for marijuana cases. Again, you may have found it difficult to believe the fiscal note submitted by the Department of Law, in which the attorney general's office anticipates no additional funding needs.

In fact, because my $4 million estimate is based on current levels of activity, we must conclude that the figure would actually be higher, since some crimes that are now misdemeanors would become felonies. You have heard or will hear that the Public Defender Agency anticipates a rise in their workload if this bill is enacted into law. Part of the reason is that felonies require more work than misdemeanors. I don't have the cost-per-case breakdown for Alaska, but we did find a fiscal note from the Iowa Legislative Services Agency regarding Iowa's costs of prosecution. In 2004 it was estimated that simple misdemeanors cost $14 to $300, serious misdemeanors were $100 to $5,000 and the lowest felonies ranged from $2,000 to $8,000. If Alaska's costs are similar, then it is clear how and why costs will rise. The Public Defender Agency says that the new law will result in at least 250 of its current misdemeanor cases becoming felonies, as well as a 50% increase in the number of misdemeanor cases they handle.

Corrections costs will also rise. Since we are more prone to incarcerate felons, there will be an increase in the number of felons who must be housed, although there may be more people convicted of marijuana misdemeanors who will be ordered to serve time as well. We estimated last year that approximately 132 people were incarcerated in one way or another because of marijuana convictions, at an estimated annual cost of $5.05 million. In keeping with my preceding calculations, we can expect an increase in corrections expenditures of about $2.16 million with the addition of roughly 56 inmates to the system.

The sum of the new costs is therefore estimated at $6.77 million, bringing the total average yearly direct costs of marijuana prohibition in Alaska to $22.77 million.

In the report prepared last year, we calculated some indirect costs as well. We estimated that lost productivity from marijuana prosecutions amounted approximately to $6 million annually in wages and benefits, plus taxes paid by the employer. This number rises to $8.26 million when we contemplate the increase in prisoner numbers. The lost productivity is actually higher because the value of the employee output should be higher than the combined costs of creating that output.

We also tried to estimate social service costs, which is tricky without a lot more inmate/family information. I would refer you to the original report for a detailed explanation of our estimation procedures, but our result for the current number of people in jail because of marijuana convictions easily surpasses $1 million when all types of

assistance are figured in. The addition of another projected 31 inmates with families adds another $450,000 to the potential costs.

6.2% of the corrections population is there because of parole and probation violations and may add another $500,000 to corrections costs if the relationship of marijuana offenders to total offenders holds to this level. This cost might rise to over $700,000 if the above inmate population increases occur.

In summary, then, if this bill is passed into law, and marijuana crimes are prosecuted as they are in the Lower 48, I have estimated that the annual direct costs to the criminal justice system will be $6.77 million, and the indirect costs of things like lost wages, family assistance, and secondary offenses will be another $3.35 million. In round numbers, we can look forward to an additional economic impact of $10 million, bringing the total costs of marijuana prohibition for Alaska to the range of $35 million to $40 million per year.

If prohibition *works*, one might argue that these costs are tolerable. But if prohibition *fails*, these costs are in *addition to* any social costs that actually stem directly from marijuana use. There is little doubt that many people will avoid a behavior if it is illegal. The questions we must ask are, by how much is marijuana use reduced, and is it worth the costs that result from prohibiting it.

Prohibition of marijuana shows little or no evidence of being effective in its primary goal, reducing consumption. In the interest of time, I won't discuss in detail the studies that demonstrated this in our report from last year. In fact, you only need to consider Finding #1 from this bill to realize that prohibition has failed: "marijuana has been for many years and continues to be the most commonly used illegal controlled substance in the United States".

I do not believe, based on the studies I have cited here and in last year's report, that there will be a significant reduction in the use of marijuana either through the higher risk of punishment or through the higher prices that will result. Violent crime and crimes against property may even rise, as they did after the recriminalization of marijuana in 1990.

I do believe that this Legislature has good intentions, such as reducing marijuana consumption by adolescents. However, it is virtually certain that increased penalties for marijuana use will fail to accomplish that, and instead will result in large cost increases to the people of this State. I strongly urge you to reject this bill.

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Testimony of Gregory T. Carter, MD

This document is provided in regards to Alaska State Senate Bill No. 74 and House Bill 96, which intend to re-criminalize marijuana. I wish to comment on a number of scientific inaccuracies in the "findings" section of these bills. I am a practicing physician and medical researcher, studying the medicinal uses of marijuana (cannabis). I have published and lectured in this area extensively. This is all documented in my curriculum vitae, which I have also made available.

The overall health consequences of recreational marijuana use -- even heavy, chronic use -- are fairly minor, particularly if one avoids smoking. This is something an increasing number of marijuana users are doing by use of relatively simple devices known as vaporizers. The addiction and dependence potential of marijuana is relatively low, much lower than tobacco and alcohol. According to an Institute of Medicine study in 1999, the addiction rate of marijuana is less than half that of alcohol and less than one-third that of tobacco. A proportion of regular users of cannabis will develop some tolerance. A number of studies have demonstrated that acute cannabis smoking produces minimal effects on complex cognitive task performance in experienced cannabis users.

Marijuana does not cause aggression or violent behavior but rather tends to reduce it. In contrast, alcohol is well documented to lead to aggression in some people. Statements in SB 74 legislation (section 2.5) such as, "A high percentage of adults arrested in this state for domestic violence test positive for marijuana..." are misleading and meaningless without a complete analysis of the dependent and independent variables involved in the episodes. To the degree that such statements are intended to imply that marijuana is a cause of violence, the research overwhelmingly suggests that such a conclusion is simply wrong. This is much akin to the early links purportedly found between coffee drinking and cancer, which later turned out to be spurious. They simply reflected the fact that many coffee drinkers also smoked tobacco.

Indeed marijuana is a complex plant, with several existing phenotypes, each containing over 400 chemicals. Approximately 70 are chemically unique and classified as plant cannabinoids. There are also naturally occurring cannabinoids produced in the human body and these are part of our natural physiology controlling mood, pain, and appetite, among other functions. Delta-9 tetrahydrocannabinol (THC) is the most powerful psychoactive ingredient in marijuana, and this is the active ingredient in

dronabinol (Marinol). The Food and Drug Administration (FDA) first licensed and approved dronabinol in 1986 for treatment of nausea and vomiting associated with chemotherapy. The indication was expanded in 1992 for the treatment of anorexia associated with weight loss in patients with AIDS wasting syndrome.

Dronabinol was initially made available by prescription as a schedule II drug, the most restrictive category of drugs that are legal for medical use under federal law. However, since there has never been a reported overdose or serious, life-threatening side effect, the United States Drug Enforcement Administration, in cooperation with the Food and Drug Administration, reclassified the scheduling status of dronabinol from a Schedule II (CII) to a Schedule III (CIII) controlled substance. Under this less-restrictive schedule, dronabinol prescriptions can now be phoned in, with multiple refills authorized on a single prescription. Dronabinol is 100% THC, the strongest ingredient in natural marijuana, and the Federal government licenses it with minimal prescribing restrictions. The strongest natural marijuana—which is only seen relatively rarely—would only contain 25-30% THC by weight. From a pharmacological perspective, marijuana is actually remarkably safe, with relatively low toxicity, notably lower than that of many legal medicinal and recreational drugs. Lethal doses in humans have never been described. The theoretical lethal dose in 50 percent (LD50) is estimated to be 1 to 20,000 or 1 to 40,000. In plain English, that means, it would require 1500 pounds of cannabis smoked in fifteen minutes to induce a lethal effect. In contrast, you can quite easily kill yourself with a bottle of extra-strength Tylenol or aspirin.

The claim that today's marijuana is so much stronger and more dangerous than it was in 1975 (made in section 2.9), implying that it is effectively a different drug, is scientifically preposterous. The same, ridiculous argument could be made regarding today's coffee, comparing a triple shot espresso drink of today with the Maxwell House of yesterday. The only difference between this example and marijuana is that one can overdose on caffeine and there are potentially serious health consequences of extreme caffeine intake, including cardiac arrhythmia, acute hypertension, and stroke. With marijuana, no such consequences have been documented.

Further, according to the Federal Government's own website (WhiteHousedrugpolicy.gov), which was last updated on October 16, 2004, the average potency of marijuana today stands at approximately 5 percent THC. Indeed, this figure is an increase over past years. THC content averaged 4 percent in the 1990s, and just under 3 percent for the 1980s. However, in terms of drug strength, this increase is nearly inconsequential. Marijuana poses no risk of fatal overdose, regardless of THC content, and studies indicate that recreational pot smokers readily distinguish between high and low potency marijuana and moderate their use accordingly just as an alcohol consumer would drink fewer ounces of (high potency) bourbon than they would ounces of (low potency) beer.

With regard to the increase in people allegedly in treatment for "marijuana abuse" (mentioned in section 2.10), this is reflective of the increase in marijuana arrests, as the majority of such admissions are court mandated. This is a sign of more aggressive law enforcement, not proof of addiction. Since 1995, approximately 5.5 million Americans have been arrested on marijuana charges. Nearly 90 percent of them were charged with possession only, and approximately one out of three were first-time, youthful (age 14 to 19 years old) offenders. Naturally, most judges are hesitant to sentence these defendants to jail or saddle them with a criminal record. Their only alternative is drug

treatment.

What is the end result of all this? Admissions to drug rehabilitation clinics among adolescent marijuana users have increased dramatically since the mid-1990s. However, this rise in marijuana admissions is due exclusively to a proportional increase in teens referred to drug treatment by the criminal justice system. In fact, since 1995, the proportion of admissions from all sources other than the criminal justice system has actually declined, according to the federal Drug and Alcohol Services Information System (DASIS). Consequently, DASIS reports that today, "over half (54 percent) of all adolescent marijuana admissions [are] through the criminal justice system," with an additional 25 percent coming from referrals from schools and substance abuse providers.

Although recent science has provided truly astounding evidence about cannabis and its relative dangers and benefits, government studies from around the world have affirmed this for over a century. As far back as 1894, The Indian Hemp Drugs Commission concluded, "the moderate use of hemp drugs is practically attended by no evil results at all." In 1925: The Panama Canal Zone Report concluded, "The influence of marijuana has apparently been greatly exaggerated. There is no evidence that it has any appreciably deleterious influence on the individual using it." In 1944 the LaGuardia Commission Report concluded "there is no direct relationship between the commission of crimes of violence and marijuana. Marihuana does not lead to morphine or cocaine or heroin addiction." In 1969, the British Wooten Report stated, "we think that the dangers of marijuana use as commonly accepted in the past have been overstated. There is no evidence that in Western society serious physical dangers are directly associated with the smoking of cannabis."

More recently, in 1970, the Canadian LeDain Commission Report found that "physical dependence to cannabis has not been demonstrated and it would appear that there are normally no adverse physiological affects occurring with abstinence from the drug, even in regular users." In 1972 the National Commission on Marihuana and Drug Abuse, also known as the Nixon Commission, concluded "there is little proven danger of physical or psychological harm from the experimental or intermittent use of natural preparations of cannabis. Moreover, existing social and legal policy is out of proportion to the individual and social harm engendered by the drug." In 1972, the Dutch Baan Commission found that "cannabis does not produce tolerance or physical dependence. The physiological effects of the use of cannabis are of a relatively harmless nature."

In 1977, the Commission of the Australian Government concluded, "one of the most striking facts is that its acute toxicity is low compared with that of any other drugs. No major health effects have manifested themselves in the community." In 1982, the National Academy of Sciences Report observed "over the past 40 years, marijuana has been accused of causing an array of antisocial effects including, provoking crime and violence, leading to heroin addiction, and destroying the American work ethic in young people. "These beliefs have not been substantiated by scientific evidence." In 1995, the report by the Dutch Government concluded, "cannabis is not very physically toxic. Everything that we now know leads to the conclusion that the risks of cannabis cannot be described as 'unacceptable.'" In 1999, the Institute of Medicine published a series of reports on marijuana, documenting it's low toxicity and high therapeutic potential.

Arguably marijuana is neither a miracle compound nor the answer to everyone's ills. Yet it is not a compound that deserves the tremendous legal and societal commotion

that has occurred over it. Over the past 30 years, the United States has spent billions in an effort to stem the use of illicit drugs, including marijuana, with limited success. Some very ill people have had to fight long court battles to defend themselves for the use of a compound that has helped them. There is no evidence that recreational marijuana use has increased in states that allow for its medicinal use. Moreover, prohibition strategies have never proven terribly effective at limiting the use of a substance for any reason, whether alcohol or other compounds. In my opinion, the medicinal marijuana user should never be considered a criminal in any state. Most major medical groups, including the Institute of Medicine, agree that marijuana is a compound with significant therapeutic potential. Over a decade ago the Drug Enforcement Administration (DEA) studied the medicinal properties of cannabis *[Re Marijuana Rescheduling Petition,* United States Department of Justice, Drug Enforcement Administration, Docket No. 86-22, 9/6/1988]. After considerable study, Administrative Law Judge Francis L. Young concluded that marijuana should be transferred to schedule II to make it available to doctors and patients, stating:

> "There are those who, in all sincerity, argue that the transfer of marijuana to Schedule II will *send a signal that marijuana is "OK"* generally for recreational use. This argument is specious. It presents no valid reason for refraining from taking an action required by law in light of the evidence . . . .The evidence in this record clearly shows that marijuana has been accepted as capable of relieving the distress of great numbers of very ill people, and doing so with safety under medical supervision. It would be unreasonable, arbitrary and capricious for DEA to continue to stand between those sufferers and the benefits of this substance in the light of the evidence in this record."

Judge Young's recommendation was ignored. Marijuana remains in schedule I. During the past thirty years, researchers mostly funded by the federal government, have studied every conceivable way that marijuana might be harmful to individual users and society. They have found very little evidence of any major physiological, psychological or social harm that can be directly attributed to marijuana. Despite all this, over a decade later the DEA and the rest of the federal government persist in their policy of total prohibition.

The scientific process continues to evaluate the therapeutic effects of marijuana through ongoing research and assessment of available data, and the trend is clearly toward greater appreciation of marijuana's beneficial effects and relatively low toxicity. Our legal system should take a similar approach, using science and logic as the basis of policy making rather than political views and societal trends that are more reflective of a paranoia over perceived potential harmful effects of recreational marijuana use, which, in fact, are not substantiated by the medical literature.

While Alaska does have a medical marijuana law, my understanding is that patients have great difficulty obtaining their medicine, and some have already testified that they fear this legislation will make their already-difficult situation even worse. That alone should be reason to look upon this legislation with great skepticism.

Respectfully submitted.

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STATE OF ALASKA, SENATE BILL No 74 "An Act making findings relating to marijuana use and possession;"

EXPERT WITNESS STATEMENT:

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Statement:

It is an honor and privilege to address the Alaskan State Senate about an issue that affects a large number of Alaskans and their families. Our purpose is to assess risks of marijuana use and ask if increased penalties are warranted based on these risks. First, I would like to introduce myself and testify to my expertise in the area of drug abuse and marijuana. I am a life-long Alaskan. I moved to Alaska with my family in 1976. I am an alumni of West Valley High School and UAF. I left Alaska in 1981 for graduate and post-doctoral training. I returned to Alaska in 1990 and have since been employed at UAF where I am currently an Associate Professor in the Department of Chemistry and Biochemistry. I have devoted my life to the study of the brain and how drugs and naturally occurring drug-like chemicals affect the brain. After receiving a bachelors of science degree in psychology at UAF, I did graduate work at Mount Sinai School of Medicine in New York, NY; and at Albany Medical College in Albany, New York. My Ph.D. training and research was in neuropharmacology. Pharmacology is the study of the theory and principles of drug action. Neuropharmacology is the study of the theory and principles of drug action on the brain. I was trained by Dr. Stanley Glick, an established neuropharmacologist who has studied drug addiction and abuse and pharmacotherapies for drug addiction for more than 4 decades. My Ph.D. thesis showed how learning is involved in drug addiction. Learned, drug seeking behavior, is now recognized as a primary target for treatment of addictions. I received 3 years of post-doctoral training at the Karolinska Institute in Stockholm, Sweden in the laboratory of Dr. Urban Ungerstedt, another preeminent neuropharmacologist who pioneered our understanding of dopamine, a neurotransmitter now known to lie at the heart of addiction, motivation and reward. I have published 33 peer reviewed papers and 5 book chapters regarding addiction and aspects of drugs and the brain. I was a leader in establishing a neuroscience program at UAF funded in 2000 by a $7.5 million grant from the National Institutes of Health. Most recently I am recognized as an expert on neuroprotection and neuroplasticity in hibernation, a phenomenon my laboratory studies as a model of tolerance to stroke and neurodegenerative disease such as Alzheimer's and Parkinson's disease. Here I comment on findings purported by the legislature to suggest that marijuana poses a threat to the

public health that justifies prohibiting its use and possession in the state of Alaska, even by adults in private.

FINDINGS.
The legislature finds that
(1) marijuana has been for many years and continues to be the most commonly used illegal controlled substance in the United States;

Estimates of the number of Alaskans who use marijuana emphasizes the numbers of Alaskans who will be affected by this legislation. In addition to users of marijuana, their families are affected by legal and health related consequences of marijuana use and highlights the importance of rational and informed discussion of these risks. As a wife, mother, and long-time Alaskan, I have witnessed devastating consequences of federal marijuana use and trafficking laws on families in the Fairbanks area. In my professional opinion as a neuropharmacologist, the health and social risks of marijuana do not in any way, justify the severity of consequences imposed by federal law. Indeed, legal risks far outweigh health and social risks associated with marijuana use.

(2) marijuana has many adverse health and social effects, and there is evidence that it has addictive properties similar to heroin and other similar illegal controlled substances;

Addiction, (operationally defined as drug seeking behavior), is a combined effect of drug reward and drug withdrawal. Reward, as well as desire to reduce unpleasant symptoms of withdrawal, increases frequency of drug seeking behavior. Human epidemiological data (i.e., statistical analysis of patterns of use) as well as animal data rank addictive properties of marijuana below tobacco, alcohol, cocaine and heroin. Regarding human use, evidence suggests that as few as 10% of individuals who experiment with marijuana become daily users (cf. McRae et al., 2003), and others (Anthony et al., 1994) report that dependence among users is highest for tobacco, followed by heroin, alcohol, cocaine and finally cannabis.

Drug	*Dependence* among users (%)*	
	Male	Female
Tobacco	33	31
Heroin	22	25
Alcohol	21	9
Cocaine	18	15
Cannabis	12	5

* Dependence is defined by DSM-III criteria, evaluated via a modified Composite International Diagnostic Interview. Adapted from Anthony et al., (1994).

Laboratory animal data is consistent with low addictive potential of cannabis where positive-reinforcing and dependence-producing actions of THC, the active ingredient in marijuana, have been difficult to demonstrate (reviewed by Tanda and

Goldberg, 2003). Three standard techniques known as, conditioned place preference, intracranial self-stimulation and self-administration are used to assess addictive potential. All three of these techniques have failed to show consistent, positive reinforcing effects of THC. While Tanda and Goldberg (2003) argue that 3 decades of negative findings regarding abuse potential of marijuana are due to suboptimal conditions of drug preparation and rates of intravenous administration, other drugs of abuse have not been difficult to optimize for animal studies.

The low addictive potential of cannabis may be due, in part, to the fact that abstinence seldom produces pronounced signs of withdrawal (Anthony et al., 1994; Tanda and Goldberg, 2003). THC is stored in fat tissue due to its high fat solubility and then slowly released. This slow release likely prevents development of a pronounced withdrawal syndrome when cannabis use is abruptly stopped (Grotenhermen, 2003). Overall, given the difficulty in training animals to self-administer THC and the absence of pronounced withdrawal symptoms, the suggestion that marijuana has addictive properties similar to heroin and other illegal substances is not warranted.

Anthony et al, 1994, Experimental and Clinical Psychopharmacology, 2(3), 244-268.
Grotenhermen, 2003, Drug Disposition, 42(4), 327-360.
McRae et al., 2003, Journal of Substance Abuse Treatment, 24, 369-376.
Tanda and Goldberg, 2003, Psychopharmacology, 169(2),115-34.

(3) in addition to concerns about marijuana use generally, the legislature is particularly concerned with the rates of use of marijuana by young people and Alaska Natives, which exceed national averages; and,
(4) early exposure of children to marijuana increases the likelihood of lifelong health and social problems, and makes it much more likely that the person will go on to use more potent illegal controlled substances;

A model known as the "gateway theory" of adolescent drug use was first proposed in 1975 (Kandel, 1975). The gateway theory suggests that adolescents typically use tobacco or alcohol before progressing to illicit substances including marijuana. Later studies showed that cigarette or alcohol use predicts subsequent illicit drug use for females while alcohol use predicts progression to illicit drug use in males (reviewed in Helstrom et al., 2004). After cigarette and alcohol use, progression may continue to marijuana, however, the cause of this progression is unknown. The simplest explanation for the observed progression is that early access to and use of cannabis may reduce perceived barriers against the use of other illegal drugs and provide access through the illicit market to more addictive drugs of abuse such as heroin, cocaine and methamphetamine (Lynskey et al., 2003).

Kandel, 1975, Science, 190, 912-914
Lynskey et al., 2003, JAMA. 2003;289:427-433
Helstrom et al., 2004, Prevention Science,Vol 5(4), 267-277