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ALCOHOL POLICY CONSIDERATIONS FOR INDIAN RESERVATIONS AND BORDERTOWN COMMUNITIES

PHILIP A. MAY, Ph. D.

ABSTRACT: For some topics, particularly in public health, summaries are dangerous because they may create the idea that a single or simple solution exists. This topic is one where a summary can create a false expectation of simplicity. There is no simple or easy solution to the problem of alcohol abuse in any community, especially reservation and bordertown communities in the western United States. The solution is complex, it must be comprehensive, and it will take a great deal of effort over time to reduce alcohol and substance abuse in any individual community.

Indian communities must develop a comprehensive, consistent, and clearly defined alcohol prevention/intervention policy. Such a policy must utilize a systematic, public health approach that considers the physical, mental, and social well being of each and every individual within the region. It must address all types of problematic alcohol consumption, from sporadic alcohol consumption (light and heavy) to regular alcohol abuse and chronic alcoholism, for the problems found in Indian and bordertown communities arise from a variety of different drinking patterns.

Presented in this paper are a large number of policy and prevention options that have been used successfully in human societies in various parts of the world and in the United States. The intent of the paper is to present and describe the variety of options for addressing alcohol problems that have been found to be of value in the control and reduction of alcohol abuse and related problems. The three broad categories of approach are: controlling the supply of alcoholic beverages through statute and regulation; shaping drinking practices directly; and reducing the physical and social environmental risks. Indian tribal councils and Native communities can, if they so desire, consider, debate, and enact any or all of these measures. The important issue is that they should be aware of these ideas for prevention and consider them carefully. If the preventive measures described here can be applied systematically and reasonably within the social and cultural

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contexts of a Native community, then the ultimate result should be positive.

Readers are encouraged to read this paper carefully, to study the tables and figures, and if more detail is desired, to consult some of the many references found in the back. Comprehensive and positive alcohol policy has been ignored for too long in Indian country, and the resultant toll in morbidity, mortality, and suffering is too high. This paper presents the ingredients for a comprehensive policy. Each community needs to work up its own recipe.

In a recent survey of the Navajo living in the south central portion of the main Navajo reservation, four factors seemed obvious (May & Smith, 1988). One, most Navajos surveyed had a substantial understanding of the negative health and social consequences caused by alcohol abuse. Most individuals correctly identified alcohol abuse as leading to liver disease, accidents, trauma, suicide, internal medical problems, and other individual maladies. Two, most Navajos surveyed favor prohibition over legalization (81% vs. 19%) as the one policy that should be in effect on the reservation (May & Smith, 1988). Three, many Navajo respondents (63%) believed that Indians have a physiological or biological weakness to alcohol that non-Indians do not have. Four, fewer Navajo adults drink alcohol (52%) than other people in the general population of the United States (67%).

Each of these four points is a recurring theme on many reservations. It has been my experience over the past two decades to be confronted with these issues time and time again. That is, among most tribes, the members: (1) are well aware of the individual and far-reaching effects of alcohol abuse; (2) seldom venture to debate alcohol policy at all, and when policy is discussed, it is discussed in a highly polarized, "either/or," wet-versus-dry fashion; (3) believe that Indians are more highly susceptible in the physiological sense to the intoxicating effects of alcohol (a belief shared by most bordertown and western U.S. residents); and (4) generally believe that alcohol use and abuse are much more widespread in their population than they really are.

A Plan of Action for Indian Prevention Initiatives

Since this paper is long enough without a detailed discussion of the above points, a few paragraphs building on those points will set the stage for the rest of the paper. From point one, it is clear that continued emphasis on the "facts" about the negative consequences of alcohol abuse alone will not alleviate or solve the problem. The current problems of alcohol abuse are not a result of a deficit of information about individual consequences. In fact, health education that focuses only on the negative

health consequences could probably be de-emphasized on many reservations.

The answer to this dilemma for health educators and public health officials may lie in point two. Health education and public attention might focus directly on the many options of public policy and prevention techniques that have been debated, implemented, and evaluated elsewhere in the nation and world. Thus, the whole focus of health education among tribal populations and tribal leaders could be expanded and redirected. Health education on what is possible would make for a more positive and proactive focus.

Before any major redirection of debate and policy considerations will be possible or is likely to be productive, the other two points or issues must also be considered.

Point three mentioned above is an erroneous statement. A number of studies have shown that Indian males metabolize alcohol as rapidly, or more rapidly, than non-Indians of various ethnic and racial backgrounds (Bennion & Li, 1976; Farris & Jones, 1978b; Reed, Kalant, Griffins, Kapur, & Rankin, 1976; Schaefer, 1981; Zeiner, Perrez & Cowden, 1976). Further, Indian women do not seem to suffer any special intoxication effects beyond those shown by other women, even though they did metabolize alcohol slightly faster in one study (Farris & Jones, 1978a). Finally, the livers of Indians have been studied through biopsy and seem to be similar in both structure and phenotype to those of non-Indians, even Western Europeans (Bennion & Li, 1976; Rex, Bosion, Smialek & Li, 1985). In contradiction of the above points, there is only one dissenting study. The one study that did show a slight difference (deficit) in alcohol metabolism between Canadian Indians and non-Indians (Fenna, Mix, Schaefer & Gilbert, 1971) was so flawed scientifically that it drew immediate and consistent criticism (Leiber, 1972; Bennion & Li, 1976). Therefore, three points need to be openly discussed and publicized in Indian communities to clear up these issues and open the arena for debate. These are as follows. One, that given the current scientific evidence, *Indians, as an ethnic or as tribal groupings, are no more or no less susceptible, in the biophysiological sense, to the ill effects of alcohol abuse than are non-Indians*. Two, alcohol consumption, metabolism, and the consequences of alcohol abuse affect various individuals within each ethnic group very differently; therefore, there is as much variation within an ethnic group as there is between groups (Reed, 1985). Three, given the current scientific evidence, both the causes of and solutions to alcohol abuse problems in an Indian community lie in the social and cultural realm of the community itself, the subcultures within it, and the social structures in the surrounding region (Bach & Bornstein, 1981; Bennion & Li, 1976; Dozier, 1966).

The final issue of importance (point four) is drinking prevalence. To help set the stage for public debate on alcohol policy, a discussion (and possibly a study) of the prevalence of drinking in the particular community would be very useful. Stereotypes and myths have so clouded the perceptions of most Americans, both Indian and non-Indian, that most people believe that a much greater proportion of the Indian population drinks than actually does so. Further, such thinking prohibits accurate and responsible debate and the ability to target the problems in the specific subgroups or areas where they truly exist.

Of the six studies of Indian adult-drinking prevalence published in the scientific literature, two have shown a higher prevalence of drinking (Graves, Hanson & Jessor, 1968; Longclaws, Barnes, Grieve, & Dumoff, 1980), one has shown a prevalence similar to that of the general U.S. population (Whittaker, 1962), and three have shown a lower overall prevalence (Levy & Kunitz, 1974; Whittaker, 1982; and May & Smith, 1988). All of these studies, however, have shown that the proportion of problem drinking among those Indians who do drink is consistently higher (two to three times) than in the general U.S. population. A clear and open consideration, and possibly a prevalence study, will help people understand and appreciate that all Indians do not drink. It will also open up clear and more objective thinking and help point the way to the locus of specific problems and the actual manifestations of these problems in particular subgroups and types of individuals.

In essence, Indian public health issues are both similar to and different than those of other human groups. Indian tribes and communities are certainly unique and special in their particular social and cultural appearances and content characteristics; but they are also groups of human beings that, in some ways, are not unlike others throughout the world. In terms of many alcohol-related phenomena, Indian individuals are very much like other people. They live and die from similar maladies, but in a different magnitude. In terms of general social structures such as norms, laws, values, and sanctioned behaviors, Indian communities have similar structures as do other communities, yet with a slightly different content or slant.

Indian communities also have many nonstructured parallels with other folk societies. They have social and spiritual expectations, values, ethics, and beliefs. Just as it is said in Ireland that the "Irish drink because they are Irish," it is said that "Indians drink because they are Indian" (Scheper-Hughes, 1987). Both Irish folk society and Indian folk society can change broad social structures, norms, laws, and expectations about drinking and eventually change values, beliefs, and behavior for more positive outcomes. Such changes would not necessarily detract from the

richness of either Irish or Indian folk culture. What it would do is change specific, targeted problems.

Alcohol and Human Behavior

So it is with most human beings and human groups. Alcohol and substance abuse problems have affected human groups for thousands of years. Few communities have been immune. But to a great extent, societies get the type of behavior that they allow (MacAndrew & Edgerton, 1969). Control of behavior in the mainstream and at the social margins is both possible and probable. Given the wide range of literature about alcohol and substance control policies in both national and international literature, many options are available for implementation. *Implementation of clear and specific policies under the proper conditions is what communities must pursue and achieve.*

A great deal of the literature focuses on how to shape drinking patterns. The emphasis in this literature is on how to keep people from drinking or how to keep the levels of consumption low and less problematic than heavy drinking (Peele, 1987; Moore & Gerstein, 1981; Colon, Cutter, & Jones, 1981). But the effects of alcohol on individuals who are already under the influence can also be affected.

Alcohol, and to a degree other substances, has the ability to impair certain basic functions in human beings. Hand-to-eye coordination, judgment of time and distance, and speech ability are some of the basic functions that are altered in human beings when under the influence of alcohol. The level of impairment is based on blood alcohol levels (BAL) or counts (BAC).^{*} A person who has a BAC of .10 is not as impaired as one with .18, nor as near death from toxicity as a person with a BAC of .40 to .50. However, many authors and researchers point out that physiological impairment at the lower levels of intoxication (e.g., <.25) does not automatically dictate or predict actual *behavior* when impaired.

MacAndrew and Edgerton (1969) were among the first to extensively document and popularize the notion that two people with the exact same levels of blood alcohol can behave very differently. An intoxicated individual can behave in a violent, aggressive, and flamboyant manner one moment and then be exactly opposite, even socially responsible, in the next moment — even though his blood alcohol level is the same.

MacAndrew and Edgerton and others make a strong case that *most behaviors of people under the influence are learned, socially determined*

^{*}The amount of alcohol in a person's body is generally described in terms of blood alcohol level (BAL) or counts (BAC). If a person has 8 parts of alcohol per 10,000 parts of other blood components, then he has .08 BAL or BAC, which is a way of expressing it as a percentage.

behaviors. Therefore, people who are under certain degrees of influence can be docile or mean drunks or can exhibit any number of behaviors in between. They can be either violent towards socially vulnerable targets (e.g., wives, children, or friends), or completely compliant, friendly, happy, and humble in the presence of others (priests, police, parents, or significantly respected others) who are perceived as likely to hold them more accountable for their actions (MacAndrew & Edgerton, 1969). Since much of what constitutes "drunken behavior" is learned by people from their social and cultural experiences, it can also be shaped by a society. Societies, over an extended period of time, can reinforce certain behaviors and punish others. Eventually this creates expectations that will determine people's actions when under the influence to a substantial degree. People can be socialized, convinced and even coerced to behave "within limits" when intoxicated. Therefore, flamboyant, violent, aggressive, or death-producing behavior does not have to result from drink. Drinking patterns can be shaped and so can the behavior of those under the influence.

Information and Knowledge Alone Is Not Enough

Knowledge, information, and techniques for public health programs on substance abuse behavior have increased dramatically in the past 15 years. It was once thought that alcohol and substance abuse were merely problems of a lack of knowledge. But the flood of information available from a variety of sources today has not, and will not, solve community problems of substance abuse exclusive of other changes. That is, knowledge alone will not solve the problem.

Knowledge and information must be combined with attitudes, beliefs, values, and social structures that teach, support, and reinforce appropriate use and nonuse of substances. Social structure, both formal and informal, must be consistent and *clear* in imparting these values and discouraging other values and behaviors related to substance use, abuse, and behavior while under the influence. If policy and structure are not matched with the desires, wishes, basic values, and opinions of a substantial and influential portion of the population affected, substance abuse reform will fail.

There Is No "Magic Bullet"

Many people in U.S. communities, and particularly those of us in the western United States, have longed for "magic bullet" solutions. That is, many seek *the* single explanation, program, or intervention that will eliminate the problem as a rifle bullet will down a foe in his tracks. Yes, it

would be wonderful if such technology were applicable and available. But it is not applicable, nor will it ever be, in a free society. There will be no one vaccine, pill, or treatment that will cure substance abuse in any one community. Instead, the solutions to the problems will come from concerted, coordinated, cooperative, and integrated efforts involving all major institutions in the affected communities.

Change must occur in familial, religious, social, economic, judicial (including enforcement), educational, and health care institutions working in concert. The order of the above list is important, for the bulk of the positive change and permanent results will eventually occur in primary social groups and will not emanate directly or completely from formal institutions. The formal social structures are there to assist, and in some cases to nudge, the primary institutions. *As such, the most profound and permanent social changes in public health occur from value and behavior shifts in primary social groups.*

Three Positive Examples of Mortality Reduced by Prevention

Evidence of the above change in health-related behavior can be found in at least three areas: heart disease mortality, car safety practices, and smoking behavior in the United States. Table 1 presents relevant data.

First, age-adjusted rates of death from ischemic (degenerative) heart disease in the United States have dropped substantially in recent years. The rate has dropped from 228.1 per 100,000 in 1970 to 113.9 in 1987 (U.S. Bureau of Census, 1990). Most of this has been attributed to change in life-style and values regarding work, smoking, diet, leisure, recreation, and exercise among males (Waldron, 1990).

Second, since 1970 the motor vehicle accident death rate (age-adjusted) in the United States has decreased from 27.4 to 19.5 per 100,000 (U.S. Bureau of Census, 1990). Most of this might be attributed to the increased use of seat belts, infant car seats, safer cars, and better highways. But it also stems from the integration of the use of these and other preventive practices by families, individuals, and society who have all placed an increased value on safety and stronger beliefs in prevention (Waller, 1989; National Research Council, 1985). Health education pointed out the need; the technology was made available and reinforced by statute and policy; many families and individuals have adopted the practice (habit) of using belts, and the result is a lower rate of accident mortality.

A third and final example is smoking behavior in the United States. Adult male smoking prevalence (males 20 years or older) has gone from 50.2% in 1965 (two years after the Surgeon General's first official

Table 1

Rates of Death (per 100,00) from Selected Causes and Smoking Prevalence in the U.S. for Selected Years 1965–1987

	1965	1970	1980	1987
Ischemic heart disease mortality (age-adjusted)		228.1	149.8	113.9
Motor vehicle accident mortality (age-adjusted)		27.4	22.9	19.5
Smoking prevalence (20+ years)				
% males	50.2	44.3	38.5	31.5
% females	31.9	30.8	29.0	26.2
Lung cancer mortality (males aged 35–44 years)		17.0	12.6	9.8
Emphysema mortality (age adjusted)		8.4	4.0	3.6

Source: U.S. Bureau of Census, 1990, pp. 78, 84, and 123.

warning) to 31.5% in 1987. Female gains have been more modest, decreasing from 31.9% to 26.2%. Nonsmoking has become the expected and enforced norm in most public buildings, at social gatherings, and among most families. One can certainly reflect on the gradual, step-by-step changes in the smoking attitudes, values, behaviors, laws, and practices that have come about as a result of both formal and informal changes in American society since 1963. Who would have thought 20 years ago that there would be smoke-free airplanes, public buildings and restaurants all over the United States? Because of the change in values and behaviors related to smoking, age-adjusted death rates from lung cancer for males aged 35 to 44 years have dropped from 17.0 per 100,000 in 1970 to 9.8 per 100,000 in 1987 (U.S. Bureau of Census, 1990), and the rate for those 45 to 54 years old has recently begun to drop. In addition, the emphysema death rate has also dropped dramatically while smoking has decreased (Waldron, 1990).

Many more examples of behavior-related health improvements can be given, and volumes of documentation could be presented. But the point is that changes in values, social structure, and routine behavior can have far-reaching, positive effects on a variety of health-related statistics (McKinlay, 1981). Similar changes in societal values and structures can occur in the areas of alcohol and substance use behavior. Of concern here is affecting positive change in behaviors related to substance abuse among Indian and Native populations.

The Problem Briefly Stated

Because the bulk of this paper is to be directed toward *prevention* of and *intervention* on alcohol problems, we will not dwell too long on the

problems at hand. So much has been written and presented in a variety of media on alcohol abuse problems among Indians and Alaska Natives, that it is not necessary to elaborate greatly here (*Albuquerque Tribune*, 1988; Sears & Ferguson, 1970; Jessor et al., 1968; Mills, 1980; Harding Associates, 1988; Gallup Independent, 1987). Furthermore, many social and environmental conditions in and around various reservation areas are structurally very similar because of the way they have been shaped by rather uniform reservation, federal, and state laws and policies (May, 1975, 1976, 1989c; *Anchorage Daily News*, 1988; *Albuquerque Tribune*, 1988; Braroe, 1975). It should suffice here to review the latest mortality for the various Indian regions and to redirect some common understandings about alcohol and Indians. Therefore, the following data will attempt to present mortality data in ways in which they are seldom if ever seen. This is done to try to adapt the analysis most closely to the needs of prevention through social policy.

Alcohol and substance abuse take a disproportionate toll among most groups of Indians and Alaska Natives in the western United States as compared with both the United States averages and the averages of western states in which many Indians live. In Table 2, some of the relevant and most current mortality data are summarized for Indians and Alaska Natives by age and sex-specific categories. Without dwelling too much on the details, we can conclude that the national Indian figures indicate higher rates of alcohol-related death for both Indian males and females than U.S. averages in most age categories, with the ratio of Indian to non-Indian deaths highest in the ages prior to 45 years. Indian males have substantially higher rates of death than Indian females for all types of alcohol-involved causes and in all age groups. Nevertheless, Indian females still have a substantial problem. For example, when Indian females aged 25 to 34 years are compared with non-Indian females for alcohol-involved causes, Indian females die from 1.3 to 11.7 times more frequently. Likewise, Indian males have higher rates of alcohol-involved death than other U.S. males in every age and cause category except suicide in the older age groups.

In the far right-hand section of Table 2, the actual number of deaths from these causes are given for all Indians and Alaska Natives. In all, for 1984 through 1986, motor vehicle and other accidents, suicide, homicide, and alcoholism caused 4,005 deaths for males and 1,375 deaths for females for a total of 5,380 deaths. Using an approximation of alcohol involvement gleaned from the Indian and non-Indian alcohol literature (May, 1989a), the far-right column provides an estimate of the extent of alcohol-involved death.* A total of 2,494 male deaths and 871 female deaths are estimated to have involved alcohol in these three years. Of the total of 20,561 Indian and Alaska Native deaths from all causes in

Table 2
Alcohol-Involved Causes of Death for U.S. Indians and Alaska Natives (1984-1986)
and the U.S. General Population (1985) by Age, Sex, Rates per 100,000, and Number

Cause of Death	RATES															NUMBER		
	15-24			25-34			35-44			45-54			55-64			65-74		
	Ind.	U.S.	Ratio	Ind.	U.S.	Ratio	Ind.	U.S.	Ratio	Ind.	U.S.	Ratio	Ind.	U.S.	Ratio	Ind.	U.S.	Ratio
																Total x Deaths (all ages)	Est. % alcohol-involved	Total alcohol-involved (all ages)
MALE																		
MV Accident	87.9	53.3	1.6	99.8	35.6	2.8	77.3	25.1	3.1	74.9	21.8	3.4	55.8	21.8	2.4	52.6	22.6	2.3
Other Accident	50.7	20.6	2.5	59.5	25.2	2.4	77.3	24.0	3.2	70.5	25.6	2.8	71.7	32.7	2.2	90.2	45.4	2.0
Suicide	40.9	21.4	1.9	45.2	24.5	1.8	30.4	22.3	1.4	18.2	23.5	0.8	15.9	26.8	0.6	13.5	33.3	1.4
Homicide	32.2	18.9	1.7	40.8	23.1	1.8	36.2	17.9	2.0	28.3	12.8	2.2	18.6	9.1	2.1	15.0	6.4	2.5
Alcoholism*	1.2	0.2	6.0	27.4	3.4	8.1	66.6	12.4	5.4	90.6	24.6	3.7	88.5	33.7	2.7	63.1	28.4	2.2
Total deaths for above causes:																4005		2494
FEMALE																		
MV Accident	32.2	18.4	1.8	34.1	10.0	3.4	34.2	9.4	3.6	25.0	8.9	2.8	23.1	9.9	2.3	9.9	13.9	0.7
Other Accident	12.1	3.9	3.1	16.2	4.9	3.3	18.1	5.2	3.5	18.6	7.2	2.6	23.9	10.9	2.2	35.8	22.8	1.6
Suicide	7.8	4.4	1.8	7.5	5.9	1.3	8.4	7.1	1.2	3.5	8.3	0.4	3.2	7.7	0.4	2.5	6.9	0.4
Homicide	8.4	5.1	1.6	11.2	6.4	1.8	8.0	4.9	1.6	9.3	3.6	2.6	3.2	2.7	1.2	—	2.6	—
Alcoholism*	0.6	0.0	—	17.6	1.5	11.7	40.1	4.2	9.5	47.7	8.6	5.5	36.6	9.9	3.7	32.1	8.3	3.9
Total deaths for above causes:																1375		871

Source: Computed from U.S. Indian Health Service, 1989.

*Alcoholism deaths include the following causes: alcohol dependence syndrome, alcoholic psychoses, and chronic liver disease and cirrhosis specified as alcoholic.

these years, 16.4% were, therefore, alcohol-involved. The differential, however, is very great between Indian males and females. Among Indian males, 20.5% of all deaths were alcohol involved, while 10.3% of deaths for females involved alcohol. This translates to a ratio of 2.86 alcohol-involved male deaths to 1 female death, which is twice the ratio for nonalcohol-involved death (1.45 to 1).

Therefore, from Table 2 the reader can conclude that: Indian males have a greater problem with alcohol-involved death than Indian females; the alcohol-involved mortality data are worse for Native Americans of both sexes, with Native Americans having higher rates of death than the general U.S. statistics for most every alcohol-involved cause; and the disparity between Indian and the U.S. general population is greatest in the younger age groups (see also May 1989a; 1986). Therefore, the need for prevention of alcohol-involved problems is one of a different magnitude and, it may possibly require slightly different approaches than among the general U.S. population.

To make a further distinction about the pattern of alcohol-involved mortality among Indians, Table 3 is concerned with the different causes of death by rate, number of deaths, and similar estimates of alcohol-involvement applied to both Indians and the United States for 1987. Considering the rates in the left-hand portion of Table 3 first, one can see that the age-adjusted rates per 100,000 for U.S. Indians are higher (1.59 to 4.82) than general U.S. population rates for all five alcohol-involved causes. In fact, the overall rate for these five causes of death is 2.73 times that of the U.S. averages. Moving to the middle section of Table 3, the actual *number* of deaths recorded for these causes is presented. For U.S. Indians, the five causes that are frequently alcohol involved accounted for 1,538 (26.7%) of all deaths in 1987. When the estimates of actual alcohol involvement from the far left column of the table are applied to each cause, the magnitude of alcohol involvement is 950 deaths, or 16.5% of all Indian mortality. This compares with the overall U.S. figures of 7.7% for the same causes and 5.1% estimated as definitely alcohol related.* Therefore, the alcohol-involved mortality, as measured both by rate and as a percentage of all deaths, is currently a greater health problem in Indian country. This should be no surprise following the sex-specific rates presented in Table 2.

The Indian Health Service (IHS) Office of Planning Evaluation and Legislation has recently tried to correct for suspected misidentification of

*Actually this estimate may be somewhat conservative for Indians, for autopsy studies of motor accident victims in progress in New Mexico are showing 70% to 85% alcohol involvement in Indian crashes. Further, other accidents might be 40% or more alcohol involved in some areas.

Table 3
Age-Adjusted Mortality (rates per 100,000) and Total Deaths from Alcoholism (Alcohol-Specific)
and Alcohol-Abusive Causes for the U.S. General Population and Indian Health Service Population, 1987

Cause of Death	Estimated % Alcohol- Involved	All IHS Areas (Rate)	All U.S. (Rate)	Ratio IHS/US	Total Indian Deaths (Number)	Total Indian Alcohol- Involved Deaths (Number)	Total U.S. Deaths (Number)	Total U.S. Alcohol- Involved Deaths (Number)	Nine IHS** Areas (Rate)	Ratio Nine Areas/U.S.	Total Deaths in 9 Areas (Number)	Total Alcohol- Involved in 9 Areas (Number)
ALCOHOL- ABUSIVE												
Accidents												
Motor Vehicle	65	57.6	19.5	2.95	561	365	48,290	31,389	75.8	3.89	435	283
Other	25	45.0	15.2	2.95	420	105	46,730	11,683	61.4	4.04	330	83
Suicide	75	18.6	11.7	1.59	186	140	30,798	23,099	23.9	2.04	142	107
Homicide	80	16.3	8.6	1.90	154	123	21,203	26,504	18.9	2.19	103	82
SUB-TOTAL (Abusive Deaths)	—	137.5	55.0	2.50	1321	733	147,021	92,675	180.0	3.27	1010	555
ALCOHOLISM* (Alcohol- Specific)	100	28.9	6.0	4.82	217	217	15,909	15,909	42.7	7.12	178	178
TOTAL (Abusive & Alcoholic)	—	166.4	61.0	2.73	1538	950	162,930	108,584	222.7	3.65	1188	733
SUMMARY OF ABOVE Deaths as a percent of total deaths (U.S. Total = 2,123,323 IHS = 5,772 9 Area IHS = 3,981)	—	—	—	—	26.7%	16.5%	7.7%	5.1%	—	—	29.8%	18.4%

Source: Computed from U.S. Indian Health Service (1990).

*Alcoholism deaths for both U.S. and I.H.S. rates include the following causes: alcohol dependence syndrome, alcoholic psychoses, and chronic liver disease and cirrhosis specified as alcoholic.

**These nine areas are the ones which I.H.S. cites as not having major problems with underreporting of Indian deaths. They are: Aberdeen (SD, ND, NE), Alaska (AK), Albuquerque (NM, CO), Bemidji (MN, MI), Billings (MT, WY), Nashville (ME, NY, NC, MS, FL, LA), Navajo (AZ, NM, UT), Phoenix (AZ, UT, NV), and Tucson (Southern AZ). Not included in the nine areas because of reporting problems are: California (CA), Oklahoma (OK, KS), and Portland (WA, OR).

Indian deaths in some areas by basing some of its data breakdowns on only nine of the 12 service areas.** This may give one a more accurate accounting of the true magnitude of the problem as it exists in the more traditional and isolated western states, and it may be more representative of reservations and Native communities where conditions are the most different from major U.S. population concentrations. Furthermore, it is also where data are more complete. In the far right of Table 3, these alternate data are presented. In these rates, deaths and percentages based on the nine service areas, it is shown that the ratio (Indian vs. the U.S. population) of alcohol-involved death is even higher than in the previous comparison (3.65), and the estimate of alcohol-involved deaths as a percent of total Indian deaths is 18.4% as compared to 5.1% for the overall U.S. population.

A final consideration from Table 3 is a very important distinction for planning, prevention, and intervention (see Westermeyer, 1976). This is a distinction between different types or categories of alcohol-involved death. In the table the deaths are divided according to predominantly alcohol-abusive (sporadic alcohol abuse) and predominantly alcohol-specific (chronic alcoholism) deaths. The three causes of death listed in the upper part of the table, the alcohol-abusive causes (accidents, suicide, and homicide), are estimated to cause substantially more mortality than the alcohol-specific. In the total Indian comparison in 1987, the alcohol-abusive causes accounted for 733 deaths and the alcohol-specific causes accounted for 217 deaths. This translates as alcohol-abusive 77.2% and alcohol specific 22.8% of all Indian alcohol-involved deaths. In the nine-area comparison the data are virtually the same: 555 (75.7%) for the alcohol-abusive and 178 (24.3%) for the alcohol specific. In the general U.S. population, the percentages are slightly different, 85.3% alcohol related, and 14.7% alcohol specific.

The real significance of the above data is great. The simple message is this. Alcoholism is not really the leading or number one health problem among Indians. *We would be much more accurate in stating that alcohol abuse and alcoholism combine to be the leading health problem among Indians.* As is true for the overall U.S. population, if health and public health professionals and citizens focus only on alcoholic behaviors (or

*Actually these estimates of alcohol involvement may overestimate U.S. alcohol-related deaths. For example, U.S. literature on suicide and homicide seldom indicates more than 50% alcohol involvement for suicide or more than 70% for homicide. Further, motor vehicle accidents are usually reported as 50% alcohol related in many states. Nevertheless, for consistency and to account for possible underrecording in various communities in the nation, these same alcohol-relatedness factors were used for both U.S. and U.S. Indian calculations. **These nine areas are: Aberdeen, Alaska, Albuquerque, Bemidji, Billings, Nashville, Navajo, Phoenix, and Tucson. Excluded are: California, Oklahoma, and Portland areas.

Table 4
Area-Specific, Age-Adjusted Mortality (rates per 100,000) and Total Deaths for Alcoholism and Alcohol-Abusive Causes for the Indian Health Service Population, 1987

CAUSE OF DEATH	Approx. Alcohol Involved	All IHS Areas	Total U.S.	Service Area** Rates of Mortality (per 100,000)											
				Aberdeen	Alaska	Albuquerque	Bemidji	Billings	California	Nashville	Navajo	Oklahoma	Phoenix	Portland	Tucson
ALCOHOL-ABUSIVE															
Accidents															
Motor Vehicle	65%	57.6	19.5	71.1	28.5	91.7	41.8	87.2	40.9	46.2	92.8	26.7	81.1	39.8	206.8
Other	25%	45.0	15.2	71.8	105.1	42.2	28.9	50.8	17.0	23.0	70.9	19.7	45.1	40.1	78.2
Suicide	75%	18.6	11.7	22.2	40.1	25.8	16.6	30.4	8.2	4.8	14.7	9.4	34.2	18.7	29.6
Homicide	80%	16.3	8.6	19.4	24.6	2.7	7.2	14.2	12.7	10.6	25.3	12.6	25.4	16.6	9.4
SUB-TOTAL (Abusive)	—	137.5	55.0	184.5	198.3	162.4	94.5	182.6	78.8	84.6	203.7	68.4	185.8	115.2	324.0
ALCOHOLISM*	100%	28.9	6.0	62.8	27.6	58.3	31.5	49.4	5.9	24.7	33.5	7.4	53.1	23.7	67.1
TOTAL RATE of Alcohol-Involved Death (Rank)		166.4	61.0	247.3 (2)	225.9 (6)	220.7 (7)	126.0 (9)	232.0 (5)	94.7 (11)	109.3 (10)	237.2 (4)	75.8 (12)	238.9 (3)	138.9 (8)	391.1 (1)
Total Estimated Alcohol-Involved Deaths (N)				99	84	61	36	57	48	24	205	90	128	80	35
TOTAL DEATHS (N)				638	533	284	326	321	264	209	916	1065	584	464	170
Alcohol-Involved Deaths as a Percent of Total Deaths in Area				15.5	15.8	21.5	11.0	17.8	18.2	11.5	22.4	8.5	21.9	17.2	20.6

Source: Computed from U.S. Indian Health Service (1990).

*Alcoholism deaths for both U.S. and I.H.S. rates include the following causes: alcohol dependence syndrome, alcoholic psychoses, and chronic liver disease and cirrhosis specified as alcoholic.

**These nine areas are the ones which I.H.S. cites as not having major problems with underreporting of Indian deaths. They are: Aberdeen (SD, ND, NE), Alaska (AK), Albuquerque (NM, CO), Bemidji (MN, MI), Billings (MT, WY), Nashville (ME, NY, NC, MS, FL, LA), Navajo (AZ, NM, UT), Phoenix (AZ, UT, NV), and Tucson (Southern AZ). Not included in the nine areas because of reporting problems are: California (CA), Oklahoma (OK, KS), and Portland (WA, OR).

chronic alcoholics), then up to three-fourths of the problem is ignored. The point is that *prevention efforts must embrace all alcoholic and alcohol-abusive behaviors*. Finally, special prevention initiatives need to be aimed at the specific characteristics of each type of alcohol-involved death. One cannot expect to improve all types of alcohol-involved death with one single type of initiative.

The final table, Table 4, presents data for the 12 different IHS service areas. This table could be used by the specific areas, or communities within them, to begin to plan for prevention/intervention. It breaks out alcohol-involved causes by type, gives an estimate of the alcohol relatedness of deaths in proportion to all deaths, and allows comparison of rates with the U.S. population and the total Indian population. If this information is supplemented with additional data from a state, reservation, or service unit, then Table 4 could be used to begin public health efforts.

A summary of the significant information in Table 4 is important. First, the areas vary widely in their experience with alcohol-involved mortality. The highest rates of alcohol-involved deaths are found in Tucson, Aberdeen, Phoenix, Navajo, and Billings, while the lowest are found in the states of Oklahoma, California, and Nashville. Second, the areas have varying rates of the different kinds of death. For example: some have high rates of both alcohol-abusive and alcohol-specific causes (Aberdeen, Albuquerque, Billings, Tucson, and Phoenix); some have low rates of both (Nashville); some, as IHS 1990 reports indicate, may be affected by underreporting (California, Oklahoma, and Portland); and others have an unequal mix of alcohol-abusive and alcohol-specific deaths (Alaska and Navajo), where the alcohol-abusive deaths far exceed the incidence of alcohol-specific. Third, the percentage of deaths that are alcohol involved varies greatly by area, from 8.5% to 21.9%. Therefore, one can further expect that variation in alcohol-involved behaviors will also vary from one reservation or community to the next (see May, 1989a). These variations must be taken into consideration when planning for, or dealing with, alcohol-related problems.

Etiological Considerations

Many variables have been explored in research to determine and explain the etiology (cause) of Indian rates and patterns of alcohol-involved behavior and mortality. First, factors such as the age of the population are important in these trends. Because the average (median) age of the population of Indians in general, and particularly among some western tribes, is below that of both the U.S. and the western states, one would expect higher crude death rates from certain behavioral causes (May, 1986, 1989a, 1989c; May & Smith, 1988; Broudy & May, 1983; May, 1982b). Therefore, the causes of death reflect those typical of youthful

populations. Second, the fact that most western Indians (the bulk of the IHS service population) live in rural areas, which have a low population density, elevates certain causes of death such as accidents and violence. Long distances to health care and long emergency medical system response times in rural areas cause up to four times as much death from injuries than if the injuries occurred close to a hospital (Waller, Curran, & Noyes, 1964).

Third, the physiological, psychological, cultural, social, and behavioral differences of the tribal and Indian subpopulations throughout the United States need to be considered, for they cause variance in the death patterns of some conditions such as diabetes, cancer, and other causes of death (see Broudy & May, 1983; May & Katz, 1979; May, 1986, 1989a, 1989c; Van Winkle and May, 1986; Becker, Wiggins, Key, & Samet, 1988, 1989, 1990; Samet, Key, Hunt, & Goodwin, 1987; Samet, Coultas, Howard, Skipper, & Havie, 1988; Samet, Wiggins, Key, & Becker, 1988; Wiggins, Becker, Key, & Samet, 1989). This is true as well in alcohol-related deaths. American Indian tribes have different patterns than Anglos of sickness and death from many diseases. Further, because of physiology (e.g., obesity influences) and behavioral patterns (e.g., smoking and risk taking), there is some aggregate variation between tribes and communities. Finally, and most important for this paper, alcohol policy directed at Indians has been rather unique. This history of alcohol policy has produced particular patterns of drinking and mortality among Indians that are still evident today. Knowing and understanding these factors are important in intervention and prevention planning. Although etiological considerations will not be elaborated upon further here, knowledge about causes is essential to prevention planning and activities. Etiological factors will be to some degree incorporated in the sections that follow.

Other Indicators of Alcohol Problems

In addition to mortality, substance abuse places a great deal of strain on health care systems by creating more illness. In emergency medical care, outpatient, inpatient, and rehabilitative medicine, the impact of substance abuse is tremendous in most areas of Indian country.

Alcohol detoxification and treatment are large unmet needs as well (May, 1986). The social and economic costs of these services affect each and every citizen, abuser and nonabuser alike. Using morbidity statistics to estimate the prevalence of problems from alcohol abuse and for the planning of prevention, however, is not as useful as using mortality data. Most morbidity data are treatment visit and hospital data that seldom capture the true prevalence, for there are many who are untreated and who, therefore, are not included in the data. In addition, most treatment data are duplicative, counting multiple visits for one person. These factors

render it more difficult to tell how many people are generating the total number of visits.

In the criminal justice area, alcohol and substance abuse contribute to a majority of the police and court activities involving Indians (May, 1976; 1982b). In all areas of Indian country, and particularly the border-towns surrounding dry reservations, the police, courts, and jails are constantly occupied with cases reflecting the consequences of substance abuse (*Albuquerque Tribune*, 1988). This has been the case for many years (Ferguson, 1968). A number of studies of these problems have been undertaken in a variety of areas where Indian and Anglo cultures mix with alcohol (Leubben, 1964; Riffenburgh, 1964; Jessor et al., 1968; Winfree & Griffiths, 1975, 1983, 1985; Forslund & Cranston, 1974; Forslund & Meyers, 1975; Williams, Chadwick, & Barr, 1979; May, 1975, 1982b; Randall & Randall, 1978; Minnis, 1963). As with morbidity data, arrest data are seldom available as unduplicated counts. That is, one alcohol abuser can account for dozens of arrests (Ferguson, 1968), so the true prevalence and incidence of the problem are not known. The targeting of broadly based prevention programs is difficult to impossible using such duplicative data.

Therefore, mortality data provide an excellent place to start preventive planning, for it is not duplicative, is easily accessed, can be manipulated to show the highest risk categories (male vs. female, age, residence, etc.) of people, and can be used to target the specific alcohol-involved problem behaviors (accidents, suicide, etc.). Clinic, hospitalization, arrest, court, and treatment data are also useful, but not so much in the epidemiological sense. What these other data can do is provide an idea of the impact of the problems on particular services and new ideas about how and where to intervene upon the consequences of certain behaviors.

The above discussion of the problem of alcohol abuse among Indians is intended only as a limited overview. It is, however, one tailored to the needs of broadly focused prevention. It is imperative that those who are attempting to understand and positively impact alcohol abuse in a community consult some of the specific sources in the references section, and, if possible, do their own research for the specific populations being targeted.

The Orientation of a Community Alcohol Plan

Any community or regionwide alcohol abuse prevention program might easily break down in the face of factionalism, limited vision, and individual interests. Therefore, a community approach must focus on a *public health perspective*. In a public health approach the goal is to apply

comprehensive strategies and programs that reduce the rates of disease and early death among total groups and aggregates of individuals (Beauchamp, 1980). In most cases the target would be all people on a particular reservation and in bordertowns within a close proximity. The focus therefore is on communities and particular geographic areas and *not* on individuals.

Communities are more than mere aggregates of individuals. A community represents an integrated, working system of people, values, norms, behaviors, laws, and traits that far surpass the sum of the individual parts. Therefore, there is an emphasis on the social relationships and *patterns* of behaviors that exist in a community and in its structures. The public health approach focuses on hazards, prevention, collective responsibility, and the idea that public health is limited by certain fundamental rights (not privilege, wants, or desires), pluralism, priority, and realism (Beauchamp, 1980, 1990). The health, well-being, and survival of all in the community must be considered, planned for, and protected from a variety of forces present in modern society. These forces are technology, the consumer goods available, environmental factors, and the behaviors that currently exist.

Forming a Consensus

With a focus on the larger community, special approaches must be planned in detail at the start of a prevention effort. Beauchamp (1980) says that a community must first work diligently toward forming a consensus on alcohol. Because American values in general, and American Indian values in particular, are conflicting and ambivalent regarding alcohol, the public health approach must begin with a consensus on which aspects of alcohol-related behavior can and must be controlled, changed, or improved for the good of the larger community. According to Beauchamp (1980), "the primary message" and goal of a program should be the *"minimal or nonuse of alcohol and a zero growth in per capita alcohol consumption."* Even though 60% to 70% of the adults in most American communities (Indian and non-Indian) are either nondrinkers or very light or occasional drinkers, the problem is one that must be addressed by all in the community.

Defining "Safe Drinking" Practices

Second, Beauchamp calls for a community definition of safe drinking. Certainly abstention is the safest approach, but the public health approach must also define other drinking patterns and behaviors that do not pose a significant threat to groups or individuals (drinkers or abstainers) in the community. In other words, some drinking patterns may not be problematic and, therefore, may not be a target for preventive efforts.

Define and Promote Specific Safe Provisions

Third, once safe practices are defined, a variety of approaches should be planned and pursued to reduce unsafe situations and to encourage safe behaviors and practices. Standard approaches used by many societies are: alcohol taxation, control of availability; a variety of prescriptive laws (that tell people how to drink and how to behave when they do drink); some proscriptive laws (that tell people when and where not to drink); control of advertising, education; and environmental protection (NIAAA, 1990; U.S. Surgeon General, 1989a; Miller & Nirenberg, 1984; Moore & Gerstein, 1981; Beauchamp, 1980).

Build Community Support

Fourth, community support and activity must be broadly based. Everyone must share in the responsibility. Not just tribal and other governments, but the private sector, churches, community groups, and families must be involved. Education of the community plays a vital role in moving these forces. As such, education and the media should define the problems in public health terms and propose possible solutions. Education should emphasize especially the collective or structural basis of the problems, and not focus on individual pathology. It should also promote the public acceptance of the fairness of control measures and a more equitable distribution of the responsibility for prevention among all who have anything to do with the community. A particular focus that might be beneficial is a partnership with those involved in the production, distribution, and consumption of alcohol. Nevertheless, the focus of education should be on the control of the substance, changes in social and institutional structures, and general improvement in the community. The movement should not dwell on the failures of the minority of individuals who suffer the greatest problems (Beauchamp, 1980).

Therefore, as Beauchamp (1980) tells us, the problem is defined collectively, and the burden of solution is a collective one as well. All must share in it, from the alcohol industry, to advertising media, to local governments, to families, to traditional leaders, to churches, and to all individuals. All must be educated, motivated, and directed in the effort. Ultimately most every individual will benefit, and the community rewards will be manifest in many ways. One particular success story of this type in the Indian world is the Alkali Lake community in Canada, which is illustrated in the film *The Honour of All* (Alkali Lake Indian Band, P.O. Box 4479, Williams Lake, B.C., Canada, V2G 2V5).

Solving the Alcohol Problem: A Drastic Change in Perception and Approach

While the above general discussion draws heavily on the ideas of one author, Beauchamp, there has been a tremendous revolution in the

academically defined approach to alcohol problems in the past two decades (Room, 1984). A great shift has occurred from a focus on "alcoholism" and individuals to "alcohol-related problems" or "alcohol problems." This shift is also characterized by an emphasis on reducing the negative health consequences of this predominantly legal drug and maintaining a policy-oriented perspective (Room, 1984). As such, the ideas above are supported by a huge volume of literature, only some of which is referenced in this paper (for summaries and a variety of references see Moore & Gerstein, 1981; Skog, 1981; Yates & Hebblethwaite, 1983, 1985; Wallack, 1984-85; Grant, 1985; Moser, 1985; Botvin, 1986; Holder & Stoll, 1988; Gould, 1989; U.S. Surgeon General, 1989a, 1989b; Moskowitz, 1989; NIAAA, 1990; and Institute of Medicine, 1989, chapters 1-6).

Oversimplification and Polarization Must Be Avoided

The body of knowledge that communities may draw upon is now both extensive and growing in its usefulness. Indian communities can be part of this movement if not leaders in it. The Alkali Lake Indian Band has certainly proven that it could shape its own destiny along these lines.

The first and major challenge to initiate change in a community is to apply these ideas to real-life situations where power, politics, economic interests, personal ideology, individual rights, and the democratic process all interact in peculiar ways (O'Gorman, 1988; Morgan, 1988; Saunders, 1989; Steddon, 1989; Warner, et al., 1990).

This is a common dilemma in many focused public health programs, from tobacco use to environmental pollution, to venereal disease and AIDS, as well as in alcohol control. The tendency among many is for political absolutism and moralism to push for simplistic, extreme, and polar solutions. But polarized stances many times lead to gridlock or stalemate, so that no progress is made in improving alcohol-related problems.

Beauchamp (1990) and others argue that one of the most important challenges of democracies is "encouraging a civil ethic of restraint." Restraint in areas such as sexual behavior, drugs, risk taking, and alcohol use have a great deal in common, and all affect the health of the public. How will restraint be advocated, put forth, implemented, and enforced in alcohol policy and programs in a particular Indian community? Regardless of the specifics, many of which will follow in this paper, the potential for influence and improvement through prevention at the local, tribal, and bordertown level is enormous (see Robinson & Thether, 1985; Bloom, 1981; Schaefer, 1981). Not only can the death, injury, and adverse consequences that are alcohol involved improve, but the attitudes, values, and behaviors of the community can also change positively over

time (Caswell, Gilmeore, Maguire, & Ransom, 1989; Caswell & Gilmore, 1989; Anderson, 1989).

Another (second) particular challenge present among many tribal communities is the need for data and research documentation to guide prevention programs (see Hazeltine, 1985; Institute of Medicine, 1989, chapter six). A good research plan or specific design from the beginning of a prevention program will help in: (1) defining the plan and in implementing, monitoring and fine-tuning the approach; (2) documenting the probable effects of particular implementations; and (3) transmitting the knowledge gained to other communities.

A third, special challenge exists regarding drastically different jurisdictions of control in the impact area. Within most states in the western United States where Indians reside, there are areas of both legal and illegal alcohol sales, and tribal, county, and municipal, state, and federal controls exist simultaneously. In addition, within each jurisdiction there exist several differing views of alcohol policy among the population (May & Smith, 1988; Pendleton, Smith, & Roberts, 1990). Policies of control approached from a strict prohibition stance or a legalization stance, while in many ways similar, have interesting and profound differences (Warner et al., 1990). Either may alienate a substantial portion of the population. Again, to plan and implement effective policy, the public health perspective must be used to address the common concerns of a majority of the citizens.

Major Policy Options Introduced

In the following three sections, the “meat” of this paper is presented. A wide range of policies and prevention techniques is explored. All of these prevention techniques have been used elsewhere in the nation or the world. All have received some positive support from various methods of evaluation research undertaken in other communities. But none of the techniques should be considered foolproof when implemented in any particular community in a particular way. The evaluation literature on alcohol policies is literally riddled with diverse findings and contradictions. Some policies that have been found to be effective in one community or nation have been less effective or totally useless in others. The literature, therefore, is a confusing and difficult set of studies to summarize.

The options presented here represent techniques that have met several criteria. First, they are options that seem feasible in Indian and Native communities and bordertowns of the western United States. That is, they can be advocated or supported by regional governments or constituents at the state or federal level. Or they can be implemented directly at the local tribal or bordertown level, without state or federal

intervention, as long as they are in relative concert with the prevailing laws, opinions, values, and capabilities of the local populace. Second, they are techniques of prevention or intervention that have received some substantial support by one or more adequate outcome evaluation studies, and they were assessed as reasonably effective in the setting(s) studied. Third, they are recommendations that have received substantial support from larger communities of scholars working in applied planning.

Virtually all of the techniques presented here appear in recommendations from one of the following documents: the National Research Council, *Beyond the Shadow of Prohibition* (Moore & Gerstein, 1981); the World Health Organization, *Alcohol Policies* (Grant, 1985) and *Alcohol Policies in National Health and Development Planning* (Moser, 1985); The National Research Council, *Injury in America* (1985); the Institute of Medicine, *Prevention & Treatment of Alcohol Problems* (1989); the Surgeon General's *Workshop on Drunk Driving* (1989a, 1989b); the National Committee for Injury Prevention and Control, *Injury Prevention: Meeting the Challenge* (1989); and the National Institute on Alcohol Abuse and Alcoholism (1990).

Indian Historical Considerations

Indian experience with alcohol policy in the past has been a special case. Because of the negative, early experience of Indians with alcohol and the strong belief in the "drunken Indian" stereotype "that Indians cannot hold their liquor," strict alcohol policy has been aimed at U.S. Indians throughout history (Fuller, 1975; May, 1976). Legislation prohibiting the sale or use of alcohol by American Indians originated in early colonial times. As early as 1645, the Connecticut colony prohibited the sale of liquor to Indians. All other colonies passed similar provisions at various times in the 1600s. By 1832 the U.S. Congress had passed a law that prohibited the sale of liquor to any and all American Indians. Much of this legislation was supported, and in some cases requested, by Indian leaders themselves. The federal law remained in effect until 1953, totally denying legal access to alcohol for Indians (May, 1976). At that time each tribe was given the power to regulate alcohol traffic on its own reservation(s). By the end of 1974 only 92 reservations (31.4%) had passed laws making alcohol legal within their borders (May, 1977), and few have been enacted since 1974.* Therefore, most reservations remain technically "dry" today. Prohibition has been the modal policy.

Despite the widespread, self-imposed prohibition of alcohol in much of Indian territory, alcohol-involved problems among many tribes continue to generate high mortality. Bootlegging and purchase off reservation are substantial supply sources (Hart, 1988). A number of tribes suffer from considerable alcohol-related mortality and morbidity in spite of total prohibition in both historical and contemporary times. Many researchers

have raised the question of whether prohibition is beneficial, for alcoholism and alcohol-abusive behavior are not stopped and might actually be encouraged by the illegality of alcohol (Bach & Bornstein, 1981; Back, 1981; Dozier, 1966; Stewart, 1964).

The major purpose of this paper is to expand the awareness and consideration of policy options available to Indian tribes, leaders, law-and policy-makers, and health professionals. A tribe that chooses to retain prohibition can use many of the options contained in Figures 1 through 3 to help tighten up its enforcement and definitions of behavior on reservation. Other options presented here can also help a tribe or community know what policies and approaches to support off-reservation. Tribes that have endorsed prohibition might work more knowledgeably on the reservation and also with the border areas, local, state, and federal officials. Conversely, a tribe that has chosen or chooses to provide legal access to alcoholic beverages can select which particular options to implement. The various options in the figures provide a "shopping list" with advice for use and implementation.

Regulating the Supply of Beverages

Probably the most common and agreed-upon approach to minimizing alcohol-involved problems both past and present among all human groups has been controlling the availability of alcoholic beverages. When most alcohol was brewed on the farm, ranch, in small operations, or far away in eastern cities when transportation was poor, the supply was relatively self-limiting. But today there are few limits to the supply of alcoholic beverages off or on reservation. In addition, advertising in a variety of media is directed at increasing the demand and consumption in a variety of groups, but especially among those who are young and those who are "social" drinkers (see NIAAA, 1990, pp. 211–123). Therefore, availability is a vital issue. Since alcohol is readily available most everywhere, how does a reservation or community deal with this seemingly unlimited supply? Figure 1 summarizes some of the possibilities.

*Research in progress by the author.

Figure 1
Regulating the Supply of Alcohol Beverages

Intervention Area	Specific Recommendations	Comments
A. Taxation Revenue and Price	<ol style="list-style-type: none"> 1. Raise federal excise tax on alcohol. 2. Raise state excise tax on alcohol. 3. Institute tribal taxes on alcohol at the retail and wholesale level. 4. Adjust for inflation each year based on Consumer Price Index. 5. Tax beverages (beer, wine, and liquor) at the same rate, relative to the amount of absolute alcohol in each beverage. 6. Continue to work to regain an increased proportion of state liquor tax money to increase resources for prevention/intervention on alcohol problems in local and tribal communities. 	<p>1-5. An increase in the price of alcoholic beverages has been shown by many studies to be the most consistent and promising way to reduce alcohol-related crash and cirrhosis fatalities. See strategies to influence these policies in U.S. Surgeon General, 1989z (pp. 19-22).</p> <p>6. More money is needed to deal with problems of substance abuse.</p>
B. Off-Premise Sales and On- Premise Sales	<ol style="list-style-type: none"> 1. Match the total number of alcohol licenses to the minimum that public opinion will support. <ol style="list-style-type: none"> a. The location, density, and transportation patterns to and from an outlet must be considered in addition to the total number of licenses. 2. Maximize sales in grocery stores. 3. Minimize sales in minimart, gas station outlets. 4. Minimize or eliminate drive-up alcohol sales. 5. Minimize sales in bars, particularly where food is not emphasized. 6. Limit sales by time and place at sporting events. 7. Minimize driving distance to on- and off-premise sales by location of establishment and/or license. 8. Strictly control hours of sale — limit or expand to control abuse. 9. On- and off-premise sales of alcohol to pregnant women should be prohibited or strongly discouraged. When refused sale, the women and all others with her should be given a simple pamphlet explaining the effects of alcohol on the fetus. 	<p>1. An excess of licensed outlets may undermine control of the problem and public support of prevention. a. Location of outlet is also important.</p> <p>2. Studies indicate less drinking in cars with grocery store purchases.</p> <p>3-5. More people convicted of DUI purchase or consume their alcohol at minimarts or on-premise bar sites. Drive-up windows need more research, but probably fit in the category of minimarts. (See NIAAA, 1990).</p> <p>6. Explicit limits set a tone of responsibility.</p> <p>7. Reduce distance at risk for impaired driving.</p> <p>8. Hours of sale affect rate and timing of accidents and other alcohol-related problems. Monitor carefully.</p> <p>9. Fetal alcohol syndrome and fetal alcohol effects are the leading, major birth defects and the greatest cause of mental deficiency in New Mexico and may be in most western states. Many governments mandate fetal alcohol syndrome warnings.</p>

Intervention Area	Specific Recommendations	Comments
	<p>10. Eliminate "happy hour," free drinks, "two for one," drink contests, and ladies' night promotions (of reduced price or accelerate-pace drinks).</p> <p>11. Pass and enforce open-container laws.</p> <p>12. Examine the seller liability laws in relation to responsible server practices in the local communities.</p>	<p>10. In some studies moderate and heavy drinkers increase their consumption at low-cost promotions but do not decrease consumption at other times to compensate.</p> <p>11. Advertise their enforcement.</p> <p>12. "Dram shop" acts have been used in many states; some are strict and others are not.</p>
C. Age of Purchase/Driving	<p>1. Keep minimum drinking age at 21 years.</p> <p>2. Consider raising the minimum legal age for driving for all youths to 16, 17, or even 18.</p> <p>3. Enforce all minimum age statutes to the fullest extent of the laws and publicize in media when this occurs.</p>	<p>1. The minimum of 21 years of age for purchase is a consistent life saver.</p> <p>2. Inexperienced drivers and inexperienced drinkers are both major factors in serious alcohol-involved crashes of youth.</p> <p>3. Adults who sell or buy for youth and youths themselves must be deterred both generally and in specific cases.</p>
D. Prohibition on Reservations	<p>1. In areas where alcohol is prohibited, consider an aggressive policy that removed the power of alcohol sales and economic rewards from illicit suppliers (bootleggers) or irresponsible bordertown vendors. Options are: a. Strict prohibition where all sanctions are very heavy, clear cut, and the maximum enforcement and penalties are exercised consistently and surely.</p> <p>2. Legalization of alcohol might be instituted in a very comprehensive and well-defined policy program that has all the elements of control, taxation, and planning outlined in this report. If undertaken, a two- to four-year planning and implementation period should precede actual sales. This will ensure anticipation of and actual planning for the reduction of immediate problems.</p> <p>3. Regardless of which policy direction is taken, the clarity of the expectations of the policy and laws, and the quality of their interpretation, administration, and enforcement are the big issues. A clear and quality program that is matched to local conditions and populations will have a high probability of success.</p>	<p>1-3. In western areas of the United States there are many "dry" areas, many of them reservations (May, 1977). Where prohibition exists and patterned evasion of the laws exist, the rates of alcohol-related morbidity, mortality, and arrest are actually higher than in some "wet" areas (May, 1976). Unclear policies, however whether they are proscriptive (dry) or prescriptive (wet), will continue to cause problems. In unenforced prohibition, for example, the bootleggers set the norms of drinking (see Hart, 1988; Albuquerque Tribune, 1988). Clear-cut norms, expectations, and penalties such as in Alkalai Lake, Canada, (prohibition) or in a comprehensive legal alcohol policy, can produce better results than currently exist (May & Smith, 1988).</p>

Intervention Area	Specific Recommendations	Comments
E. Other Considerations	<ol style="list-style-type: none"> 1. Local jurisdictions (counties and municipalities) need the power to enact regulations that are more restrictive than state laws. Tribes should attempt to work with bordertowns and communities in a partnership. 2. Strongly discourage the production, sale and distribution of "alcohol enhanced" beverages such as fortified wines. 3. Encourage use of nonalcoholic beer, wine, and fruit drinks as a substitute for alcoholic beverages. 4. The less available alcoholic beverages are, then policy for the control of other substitutes needs to be considered. Of particular concern are substances (hair spray, cough syrup, inhalants, medicines, marijuana, etc.), both legal and illegal. 	<ol style="list-style-type: none"> 1. Local jurisdictions can best adapt availability to specific problems/needs. Indian reservations have more legal power over alcohol, and therefore more latitude and options, than do other communities. 2. Literature emphasizes encouraging beverages with low alcohol content. 3. Studies (see Schaefer, 1987) cite these as being "safe" alternatives to alcoholic beverages. 4. In the western states these substances are a problem with some subsegments (youth, heavy drinkers) of the population at certain times (Sundays, after hours, underage, and in times of no money).
F. Advertising	<ol style="list-style-type: none"> 1. Monitor advertising in the local areas for content: <ol style="list-style-type: none"> a. Encourage messages of abstinence or nonproblematic drinking. b. Discourage advertising that links alcohol with behaviors associated with alcohol-related problems (e.g., driving, sex, sports, heavy drinking). c. Discourage any advertising aimed at highly vulnerable groups (e.g., youths, women of child-bearing age). d. Eliminate advertising of alcohol on college campuses or other places where a substantial number of the clients are under age. e. Eliminate tax deductions for alcohol advertising and promotions other than price and product advertising. f. Add special/locally relevant warning labels to alcohol products. 2. Provide matched, counteradvertising that gives youth and other individuals safe or nondrinking messages and the information to judge advertising claims. 	<ol style="list-style-type: none"> 1. More research is needed on the effects of advertising on individuals of various groups and subgroups. See NIAAA (1990, pp. 211-213) and the U.S. Surgeon General (1989a, pp. 27-32, 1989b, pp. 15-34) for excellent reviews. The tacit purpose of advertising is to increase demand; however, most recommendations of public health officials are quite conservative as to what should be allowed or promoted. <ol style="list-style-type: none"> e. A recommendation from the U.S. Surgeon General, 1989a. f. Special labels can be mandated by law. 2. Youths who are taught to weigh and question the content of advertising will be better citizens in general. Further, they might come up with their own countermessages as similar to those advocated by the organization D.O.C. (Doctors Ought to Care) for tobacco.

Taxation Revenue and Price

Controlling alcohol availability and consumption by price is the most agreed-upon way of reducing alcohol problems (see Figure 1, Part A). Because federal excise taxes were not adjusted for inflation from 1970 until 1991, it was an area of great opportunity. It still is an option, because the increase in 1991 was not as substantial as had been recommended by several groups, including the U.S. Surgeon General's task force (1989a). Equalizing tax rates for all beverages based on their alcohol content is recommended by many (Moore & Gerstein, 1981; U.S. Surgeon General, 1989a; NIAAA, 1990).

Calculations of the national impact of the above major changes on consumption are that the price of beverages would go up 33.6% and there would be an 11% to 21% decline in the consumption of liquor, a 12% decline in beer consumption, and an 18% to 32% decline in wine consumption. The resultant tax revenue would be more than \$20.6 billion for the federal treasury, and there would be a 19% to 25% annual decline (8,400 to 11,000 deaths) in highway deaths (U.S. Surgeon General, 1989a, pp. 23–26). Other studies predict that alcohol tax and price increase will produce declines in cirrhosis deaths as well (Colon, 1981; Rush, Gliksman, & Brock, 1986). Tribal governments that have legalized alcohol sales can use tax and pricing to reduce both supply and problems at the local level.

State alcohol excise taxes could and should also be used in a similar manner. Most states, especially in the western United States, have relatively low tax rates on alcoholic beverages. An increase in the tax on beer, wine, and spirits should have a very positive effect on both the alcohol-related problems and the money available to state and local governments. This could certainly benefit bordertowns interested in prevention and intervention.

Probably the most basic, yet difficult, area of availability is for a community to try to regulate the total number of licenses issued (Figure 1, Part B). Many bordertown communities in the West (e.g., Gallup, N.M.) have more licenses than a simple application of the state formula or sound planning would dictate. Trying to eliminate existing licenses presents many problems; nevertheless, the *number* of outlets is an important to consideration in any community.

On-Premise Versus Off-Premise Sale

Alcohol sold in bars and on-premise sites has been generally found to produce more cases of driving under the influence (DUI). Bars where alcohol is served exclusive of food generally have more problems with alcohol-related behavior than those with a restaurant atmosphere. Mini-marts or gas station sales have recently been found to be associated with higher rates of drinking in cars, while the lowest rates of drinking and

driving come from grocery store purchases (see O'Donnell, 1985; NIAAA, 1990). Location of license, density of licenses in a geographic area, hours of sale, and conditions of sale are important.

For example, one approach to density is to spread out licenses so that each village, community, or neighborhood has access to one or more outlets. This is seen as a good way to reduce exposure to and risk for intoxicated or impaired driving, for it cuts down the miles travelled. On the other hand, some communities have tried to concentrate all licenses in limited areas where the drinking can be more easily observed and policed, and the visibility of the problems is isolated from mainstream populations. Either approach has its merits. Marginally conservative approaches in these areas generally produce positive changes in alcohol-related problems (Hoadley, Fuchs, & Holder, 1984). The literature is rich with examples of studies and interventions that might be tried locally. (For more detail see Colon & Cutter, 1983; MacDonald & Whitehead, 1983; Gusfield, Rasmussen, & Kotarba, 1984; MacDonald, 1986; Rush, Glicksman, & Brook, 1986; Gliksman & Rush, 1986; Ravn, 1987; Holder & Blose, 1987; Blose & Holder, 1987; U.S. Surgeon General, 1989b; Mosher & Jernigan, 1989; Smith, Remington, Williamson, & Anda, 1990; and NIAAA, 1990.) Whatever type of approach to the location and type of sales is chosen, it should be specific, it should be monitored, and the resultant behavior should be studied.

Age of Purchase and Driving

The raising of the drinking age (Figure 1, Part C) in the late 1980s from 18 to 21 was heavily studied concerning its impact on impaired driving and alcohol-related crashes (see Klitzner, 1989; Vingilis & DeGenova, 1984; Moskowitz, 1989; Bonnie, 1985). Generally, the raising of the age has had a substantially positive effect on vehicle deaths for 18- to 20-year-olds. Little effect has been found for 16- and 17-year-olds, but such laws probably reduce overall drinking in youthful age groups (Vingilis & DeGenova, 1984; NIAAA, 1990). Since driving experience and drinking experience are both factors at risk in these situations, some authors have called for consideration and examination of raising minimum drivers' age as well as minimum drinking age. Tribes and border-towns might consider these ideas carefully.

Prohibition Versus Legalization

While obviously not the only choices available to tribal communities, this is a key decision (Figure 1, Part D). If a tribe legalizes alcohol on the reservation, it will allow much greater breadth of control, power, and economic options. While a majority of policy options in all Figures (1 through 3) in this paper are available to legalized communities, only some are totally within the control of prohibition communities. Nevertheless,

regardless of whether a tribe chooses legalization or prohibition, policy must be comprehensive, clear, and enforced consistently and surely. Prohibition as well as legalized communities should review all of the options in this paper as well as other published literature on alcohol control, enforcement, and treatment.

Other Considerations

Figure 1 includes a number of other considerations in addition to prohibition and legalization. At one end of the spectrum is tribal and local jurisdiction over a number of very specific regulatory laws targeting control of alcohol; this concept was strongly supported by the Surgeon General's Workshop participants (U.S. Surgeon General, 1989a). In addition, with the increased availability of nonalcoholic beer, wine, and reduced-alcohol spirits, attention is now being turned to their effects and safety (Schaefer, 1987). Encouraging the availability of nonalcoholic beverages should be considered.

At the opposite end, and a dangerous consequence of decreased availability, is the use of other substances as intoxicants. Studies of youths in the West (Oetting & Beauvais, 1989; Oetting, Beauvais, & Edwards, 1988; Beauvais, Oetting, & Edwards, 1985) indicate that alcohol availability may replace the use of solvents and other toxic substances by youths (see also May, 1982a; 1989a). In other words, when youths gain access to alcohol, many give up use of inhalants, solvents, and so on. Very heavy abusers of alcohol, conversely, seem to turn to cheaper and more available substances (such as hair spray, solvents, inhalants, etc.) when price of alcohol goes up or availability decreases (*Albuquerque Tribune*, 1988).

Addictive personalities will change substances based on availability. Currently in Albuquerque, New Mexico, some stores have removed many cough medicines, spray paints, and other inhalants from public access. Some are considering removing inexpensive hair sprays from store shelves on Sundays, for in New Mexico alcohol is not sold in package sales on Sunday. If the price of alcohol goes up, or its availability is prohibited or substantially reduced, monitoring of and policies regarding these other substances will likely be needed. Many reservations that have chosen prohibition have substantial problems with inhalants and solvent abuse.

Banning advertising (Figure 1, Part E) is an approach that various governmental agencies have used to regulate both tobacco and alcohol. Further, there is some growing popular support for limitations or bans on alcohol advertisement in various media such as television. The U.S. Surgeon General's recommendations (1989a) contain one whole section on advertising; the summary calls for eliminating advertising on college campuses, at public and sports events (e.g., rodeos, pow wows), and to

youths. It also calls for counteradvertising (to educate people about the dangers of alcohol abuse), an enhanced warning label system, and the monitoring of the content of advertisements by local communities.

While some research is needed, there is evidence (Atkin, Hocking, & Block, 1984; Atkins, Neuendorf, & McDermott, 1985) that advertising does influence patterns of, ideas about, and possibly the amount of consumption by individuals. Therefore, the media and advertising should be monitored by tribal and local communities. Bordertown and tribal communities might work to eliminate all alcohol advertising in local papers, on billboards, or at special events. At the very least, advertisers should be called upon by all to portray the least problematic ideas, values, and behaviors about drinking. In an ideal situation, only the best and most positive local, community values would be supported by the media.

Concepts of Safer/Appropriate Drinking

In Figure 2, Part A, techniques of safer or appropriate drinking are presented. As MacAndrew and Edgerton (1969) and many others have indicated, communities must work to define and clearly communicate what alcohol-related behaviors are totally unacceptable and those that will be allowed (Figure 2, Part A). The five behaviors that communities should consider defining as unacceptable and negatively sanction in a clear and consistent manner are: driving under the influence (DUI), chronic intoxication or inebriation, violence related to alcohol abuse, public intoxication, and drinking by women during pregnancy (see Moore & Gerstein, 1981; U.S. Surgeon General, 1981; NIAAA, 1990). Behaviors that can be tolerated with relatively minimal consequences are moderate drinking in association with foods in restaurants, and drinking that is not daily nor more than two drinks per day on days when drinking. Practices that should be encouraged include: the substitution of nonalcoholic beverages or low alcoholic beverages, abstinence (especially during childbearing years), and recreational and other activities that are free of alcohol.

Drinking and Law

Because many of the above measures have been considered important by communities over the years, laws have been passed to punish noncompliance and, hopefully, provide for general deterrence from these behaviors (Figure 2, Part B). Most current DUI laws in the United States set legal intoxication at the .10% BAC level, and a level of .05% is usually considered presumed or possible impairment. Most modern countries in

*A drink is usually defined as a 12-ounce beer, a 7-ounce glass of wine, or a mixed drink with 2 ounces of 86 proof liquor.

the world have stricter BAC levels (.08%). The American Medical Association and several committees of the Surgeon General's Task Force on Drunk Driving have recommended .05% as a legal level of impairment (U.S. Surgeon General, 1989a; Bonnie, 1985; Grant, 1985; Moser, 1985). Several states (e.g., Oregon) have recently lowered their levels to .08%; therefore, the move to stricter definitions is under-way. A tribe can set and enforce its own definitions. At the very least, drinking by under-aged persons (21 years) should also be more carefully and consistently enforced.

Figure 2
Shaping Drinking Practices Directly

Intervention Area	Specific Recommendations	Comments
A. Concepts of Safer/Appropriate Drinking	<p>1. Emphasize strongly that:</p> <ul style="list-style-type: none"> a. Drinking when driving or performing hazardous mechanical tasks is unacceptable. b. Long-term excess of drinking leads to cirrhosis, kidney problems, pancreatitis, and heart disease. c. Drunkenness is in no way and explanation or excuse for violent or aggressive behaviour in any group or for any individuals. d. Drinking by a female during pregnancy is not acceptable. 	<p>1. Items a-c are recommended approaches by the National Research Council (Moore & Gerstein, 1981). Further strict defining of "within limits" behavior, when integrated into social practices, reinforced and enforced are excellent deterrents (MacAndrew & Edgerton, 1969).</p> <p>d. Drinking during pregnancy causes fetal alcohol syndrome or fetal alcohol effects and is now gaining policy support in many localities. Fetal alcohol damage has been found to be a growing problem on Indian reservations (May, et al., 1983).</p>
	<p>2. Further, support the ideas that:</p> <ul style="list-style-type: none"> a. Drinking while eating is more acceptable than while not eating. b. Drinking more low alcohol content or no alcohol beverages is preferable. c. Substitute nonalcohol involved recreation for alcohol-centered activities. d. One should not drink every day, never exceed a per-day limit (e.g., two drinks) and should not ever drink, smoke, or take any drugs (prescription, over the counter, or illicit) when planning to have a child. e. Public intoxication should be minimized to its lowest level through innovative policy. 	<p>2. All of these have been put forth by governments at one time or another and many of the practices have strong support in the literature as being less problematic than other drinking practices.</p> <p>e. Public intoxication is unacceptable and is damaging to community values, role models, and spirit, not to mention that it creates a situation where an intoxicated person and others may be victimized.</p>

Intervention Area	Specific Recommendations	Comments
	<ol style="list-style-type: none"> 3. Distribute BAC calculation wheels and teach people to use them so they know what levels are dangerous (e.g., >.05). 4. Encourage alcohol education (especially policy) for civic leaders, employers, educators, law enforcement, judicial, and other influential decision-makers. 5. Expose people to drunk driving demonstrations such as driving trials, "the enforcer" crash test machine, etc. 	3-5. All are recommended by a variety of studies.
B. Drinking and Law	<ol style="list-style-type: none"> 1. Driving under the influence (>.10 BAC) is illegal and will be fully prosecuted. 2. Driving with a BAC of 0.5 or greater, a driver can be considered as impaired and can be prosecuted as impaired if evidence is available. 3. Try to reduce the explicit legal intoxication level to >.05 or at least >.08, if possible. 4. Driving with >.02 or more among people under 21 years of age should be illegal and receive further penalties since the person is illegally drinking and more than likely impaired by lower levels of alcohol. 	<ol style="list-style-type: none"> 1. This is the current standard in most states. 2. Current standard in most states that is very frequently ignored. 3. The American Medical Association recommends .05 level as a national standard as did several of the U.S. Surgeon General's Task Force committees. Most European countries have .08 or less as a standard. 4. Lower levels of BAC for youths were endorsed by the Surgeon General's Task Force.
	<ol style="list-style-type: none"> 5. Drastically increase the likelihood of being apprehended for DUI. <ol style="list-style-type: none"> a. Administer a breathalyzer test for drivers in any vehicular accident. 6. Use strictly and routinely or pass "per se" statutes of motor vehicle laws in most states. 7. Should public intoxication be illegal again? 8. Court-order detox, short-term treatment, or other therapy upon first or second public intoxication event within a 12-month period. 9. Increase the use of pocket breath testers and breath alcohol testing mobiles for pre-screening and screening of drivers stopped. 10. Utilize sobriety checkpoints on roads and publicize the result of these crackdowns. 	<ol style="list-style-type: none"> Current probabilities for arrest are estimated to be between 1 in 2,000 and 1 in 500 (U.S. studies) to as low as 1 in 4 in New South Wales, Australia. Already in place in many states but frequently avoided. Trial studies are needed. This might be effective as F-2 in this figure has been found to be. They can save time and money in field tests for quick checks of sobriety. These have been very effective in some states, Australia, and several European countries for a 12-18-month reduction in alcohol-related crashes (Ross, 1984).

Intervention Area	Specific Recommendations	Comments
	11. In all serious and fatal events (crashes, fights, murders, suicides, etc.), record the place of prior drinking.	11. Data and knowledge of this information, over time can focus reform or license revocation efforts as well as planning of policy information.
C. Education, Information and Training	<p>1. Provide general deterrence by insisting that people know the law, what constitutes legal impairment, and that they are likely to be checked for alcohol use in certain situations.</p> <p>2. School education programs should continue, but emphasize legal knowledge and liability as well as knowledge of substances. Self-esteem and resistance training may also be emphasized.</p> <p>3. Further, school children should be called on to study and debate policy as to how to improve both the school's atmosphere and the entire community's alcohol and substance problems.</p> <p>4. Get the youths involved in research and planning. Peer leaders are valuable in these efforts.</p> <p>5. Since most behavior relating to alcohol is learned in, and modeled from, the home environment, work with families as well.</p> <p>6. Involve churches and other community groups in the education process.</p>	<p>3-4. Participation in research and active projects will produce stronger commitment and values. This is personalized health education. Have people survey seat belt use, drinking practices, opinions, etc.</p> <p>5-6. Information is best learned and reinforced in primary social groups. Consider projects such as above (C, 3-4) and also information dissemination.</p>
	<p>7. Involve mass media to a great extent — television, radio, and newspapers are all important.</p> <p>8. Incorporate more alcohol and DUI information in driver's license tests.</p> <p>9. Public opinion surveys in local communities should be done to assess what the community needs and is ready for in terms of education.</p> <p>10. An integrated, communitywide, multiple-foci, multimedia, program should be planned and carried out over a period of years. Messages must be consistent from one institution to the next.</p>	<p>7. Message should emphasize the changing values about alcohol impairment — what is being done to promote acceptable behavior, and how unacceptable behavior is being treated and punished. Media reinforce the more personalized learning methods.</p> <p>8. Petition the state to do this.</p> <p>9. Local surveys give baseline data and are an excellent way of involving local opinions and strengths. They help people gain ownership of the problems.</p> <p>10. An integrated multifaceted approach should be the most effective.</p>

Intervention Area	Specific Recommendations	Comments
	11. Utilize the resources of the National Clearinghouse of Alcohol and Drug Information, the Wisconsin Clearinghouse, the National Council on Alcoholism and federal and state governments.	11. In recent years there has been an explosion of relevant, accurate, and useful films, pamphlets, articles, posters, tapes, and information on alcohol abuse. There may be no need to develop your own materials or "start from scratch."
D. Setting a Good Example	1. An obvious, coordinated effort by public and private groups sets a positive tone for all to see and conform to. 2. As positive alcohol behavior (e.g., lack of use/abuse) is emphasized, many are less likely to focus on the minority of abusers.	1-2. People are very prone to model their behavior in keeping with ascendant norms, values, and behaviors. Further, imitation is a very contagious trait. If one community sets a positive tone, others should follow.
E. On-site Consumption Settings	1. Server (bartender) training should be a condition of employment and license. Training should include: a. General, chronic problems from alcohol, cirrhosis, gastritis, nutrition, kidney function, d.t.'s, etc.; b. Acute problems from alcohol: DUI and calculations of level of intoxication, aggressivity, violence, seizures, and black out; c. Special issues: fetal alcohol syndrome, male vs. female alcoholism, increased risk to inexperienced drivers, etc.; d. Bar atmosphere and its effect on behavior.	1. Server training programs are relatively recent approaches and are proving to be a promising approach for preventing intoxication and alcohol-related problems in on-site settings. Tribal, state or local licenses should be contingent on this type of training.
	2. Bar atmosphere should be considered and studied. A few exploratory studies have found that the following things should be avoided to keep intoxication levels down and behavior "within limits": a. Slow, sad country music with drinking themes. b. Drinking alone. c. Bars with a reputation for being "rowdy." d. Bars without clearly safe alcohol and/or behavior policies. e. Dancing and drinking encourages longer stays. 3. Bar atmosphere that should be promoted is one of a "tavern" with governing expectations and rules and interpersonal familiarity, and not that of a "saloon" where intoxication, rowdy, violent, and flamboyant behavior is tolerated or even expected.	2. See Schaefer (1988) and Single (1987) for an idea of the research and policy questions that might be raised and explored locally. This area is, to a great extent, a promising and unexplored frontier. 3. Conditional use permits can be used to help define bar, restaurant, and other atmosphere traits that are less conducive to problem drinking (see NIAAA, 1990, pp. 217-219; Moore and Gerstein, 1981, pp. 75-76). If a bar is providing a bad atmosphere, take steps to change the situation or shut it down.

Intervention Area	Specific Recommendations	Comments
F. Treatment	<ol style="list-style-type: none"> 1. Continue to improve and, for now, expand treatment facilities for all in need. Particularly consider: <ol style="list-style-type: none"> a. Equal access of women and men and appropriate training for each gender. b. A variety of short- and long-term treatment options, and outpatient and inpatient options. c. Western and Indian relevant modalities given different interests and levels of acculturation. d. Support groups for sobriety. 2. DUI driver education classes should be available, but not as a diversion from penalties. This should be used only as an adjunct/addition to appropriate criminal justice sanctions. 3. Coordination of various kinds of treatment and follow-up at regular intervals is a must. Brief as well as long-term, outpatient as well as inpatient, and many specific types of therapies are useful. 4. All treatment should be rigorously researched to determine effective outcomes. 	<ol style="list-style-type: none"> 1. In the first years of a community effort in alcohol prevention, the number who need and request treatment will increase. But treatment alone, particularly only one type, will in no way solve the larger problems that prevention addresses. Over the long run prevention should decrease the need for treatment programs, particularly inpatient. 2. Literature on DUI diversion strongly supports driver education only in concert with normal penalties. 3. The literature supports the idea that a number of treatment modalities can work if matched to the proper type of client. Fighting among different treatment camps cannot be justified or considered productive, for all have similar goals — reducing and eliminating alcohol abuse. 4. Sound research helps improve treatment and bring in more funding for programs.

For more general deterrence to occur, the likelihood of apprehension for DUI must be increased dramatically (Ross, 1984). As it is now, low levels of apprehension (estimated at 1 in 500 to 1 in 2,000) do not keep people from driving while impaired. When apprehension rates increase and when the public perceives that apprehension is quite likely, then general deterrence is maintained by a wider segment of the people and DUI is reduced (Ross, 1984). "Per se" DUI laws in some states, which call for routine and strict procedures for license confiscation, court procedure, and tracking of DUI cases are seen as enhancing deterrence (Ross & Gonzales, 1988). Unfortunately, in many cases, for example New Mexico, these procedures are not being followed consistently (Ross, 1987). The increased use of sobriety checkpoints and pocket breathalyzers by the police will help in this effort.

A final consideration in this area is this. Should public intoxication be criminalized again? It has been recently in Gallup, New Mexico, the most notorious bordertown in the Southwest, but resources have proven insufficient to enforce it adequately. A further examination of this idea is warranted, particularly if criminal penalties are used to enhance treatment for alcoholism and alcohol abuse. This combined approach —

punishment and treatment — may serve as a motivation for change among repeat offenders.

Education, Information, and Training

Education and training should continue so that children, teens, and adults know the laws, the dangers of alcohol abuse, and the positive opportunities for community improvement in this area (Figure 2, Part C). The content and material should be slightly different for Indian youths than for non-Indian youths (Winfree & Griffiths, 1983). Ownership of the problem should be widespread, with members of the community encouraged to participate in personally fulfilling prevention and intervention activities themselves (Strecher, McEvoy-DeVillis, Becker, & Rosenstock, 1986; Chassin, Tetzloff, & Hershey, 1985). Education will be most successful if it goes beyond the schools and media to also be a major focus within families, churches, peer groups, and other primary groups. When prevention ideas take hold in primary groups and are reinforced through social learning, norms, and informal sanctions, then more effective behavior change will follow (NIAAA, 1990; Akers, 1986).

Setting a Good Example

Communities that carry out major prevention efforts to reduce alcohol abuse will set a positive example for all to follow (Figure 2, Part D). As positive behavior becomes widespread, others will aspire to similar behavior. Imitation, always a common human trait, becomes a positive variable in the equation rather than a negative one, such as when people copy deviant behavior (Phillips, 1974). This is especially true for parents, for many studies have shown parental behavior to be highly influential on the drinking of their children (see Winfree, 1985; Winfree & Sellers, 1989).

Modifying On-Site Consumption Settings

A real frontier in shaping drinking behavior awaits in on-site alcohol service settings (Figure 2, Part E). In recent years some researchers have examined how server practices can be used to modify problem drinking and the intoxication levels of patrons (Waring & Sperr, 1982; Mosher, 1984a, 1984b; Saltz, 1987; Geller, Russ, & Delphos, 1987). Bar atmosphere conditions are believed to have a profound effect on alcohol-related behavior. Conditions as specific as the beat of the music played, lighting, group interaction in the bar, the clarity of behavior expectations, and whether there is dancing or not are all being considered by researchers. In the few studies done, all of the above conditions have been found to have an influence on the drinking pace, intoxication levels, and nature of behavior (aggressive versus passive, happy versus sad) (Schaefer, 1988; Single, 1987; Schaefer, 1981; Bach & Schaefer, 1979; Moore & Gerstein, 1981). This exact idea could be applied creatively to

meet the local cultures and needs of a community (Howard, 1984). Changes in bar atmosphere should be studied regarding outcome, and who is better than local citizens and communities to work on these issues (Giesbrecht & Conroy, 1987)? Bars/establishments with poor records for violence, flamboyant behavior, and misconduct might be influenced to gradually change the atmosphere and, therefore, improve drinking and post-drinking behavior. If they do not, they might be closed by license revocation.

Treatment

While the major thrust of any communitywide program is in primary prevention and early intervention (secondary prevention), treatment programs will continue to be a vital need (May, 1986). Treatment is actually tertiary prevention. Many reservations and bordertown communities need to have more and better alcoholism treatment facilities and programs. Much of the emphasis in the past has been on in-patient programs, but a variety of modalities are needed. These include long-term and short-term programs, other-directed and self-directed programs, group and individual programs, programs especially for females, and non-Indian and tribal-specific programs (Figure 2, Part F). Too often, treatment modalities are too narrow and not tailored to the specific needs of the clients. Tailoring a variety of programs is especially necessary in multicultural regions. For more information on relevant issues in treatment see Institute of Medicine (1989, Chapters 7 through 14), Harding Associates (1988), Kahn and Stephen (1981), Kahn and Fua (1985), Ferguson (1968, 1970, 1976), Bach and Bornstein (1981), Westermeyer and Peake (1983), and Glaser (1974).

It should be emphasized, however, that treatment alone will not solve the problems of alcoholism and alcohol abuse. Treatment is only one part of a comprehensive approach that includes primary and secondary prevention as well. Because treatment is one of the most expensive parts of an improvement program, it is important to consider cheaper, short-term interventions (see Miller & Hester, 1980, 1986; Institute of Medicine, 1989, Chapter 9).

In many jurisdictions, when individuals are convicted of their first offense of DUI, it is a common practice to refer them to screening, education, and treatment programs. In some cases the normal court-ordered penalties are suspended; in others the penalties are imposed in addition to the screening and education requirements. Research is now showing that for the best results *legal penalties should be imposed in addition to the DUI prevention/intervention training* (NIAAA, 1990, pp. 222–223).

Reducing Environmental Risk — Physical And Social Measures

The most indirect way, yet socially and behaviorally the most facile approach to reducing alcohol-related problems, is to reduce environmental hazards. As some authors have stated, this involves making the world “safe for drunks” (Beauchamp, 1980) and also safe from drunks. Both ideas must be considered.

Many physical, technical measures have been outlined and presented over the years to protect people in vehicle crashes (Figure 3, Parts I–A, I–B). Seat belts, infant car seats, and air bags are all passive restraint systems that have been repeatedly proven to save lives when used properly. Clear and unequivocal policies regarding their availability and use should be passed and enforced. Tribal seat belt and infant car seat programs would be excellent public health investments. Some tribes and the IHS have sponsored infant seat purchase and loaner programs in particular regions. The Navajo Nation passed a seat belt law in 1988. Road design is also an area that can help protect individuals from crash hazards. In the past five years the IHS, Office of Environmental Health, has established an Injury Control Program, which can assist tribes with knowledge and support in this area.

The literature on injury prevention is enormous (see National Committee for Injury Prevention and Control, 1989; U.S. Surgeon General, 1989a, 1989b; National Research Council, 1985; Sleet, 1984), and should be more freely and completely applied throughout Indian and Alaska Native areas. Of particular importance is local surveillance and research about road hazards. Local communities should keep track of (preferably with data) dangerous situations (intersections, pedestrian crossings, faded paint, dangerous curves, etc.) and lobby for improvement at appropriate levels of government. Such action protects drinkers and nondrinkers alike.

Figure 3
Reducing Environmental Risk

Intervention Area	Specific Recommendations	Comments
I. Damage in Physical Environment		
A. Physical Safety Environment	<ol style="list-style-type: none"> 1. Pass, strengthen, and enforce seat belt laws. 2. Strengthen and enforce infant and child car seat laws: <ol style="list-style-type: none"> a. Institute infant seat purchase/loaner programs at all hospitals and/or car dealers. b. Educate prospective and new parents on their importance and encourage purchase and constant use. 3. Encourage or require air bags on all vehicles sold in the counties, state, and nation. 4. Study and improve all road hazards where alcohol-involved and other injuries occur: <ol style="list-style-type: none"> a. Road structures (e.g., intersections and curves). b. Nonroad structures (e.g., sidewalk and fences) to protect pedestrians. 5. A simple road intervention is to keep the line markings well painted and wide to prevent crashes by impaired (and unimpaired) drivers. 6. Work closely with the state highway safety bureaus in planning and information. 	<p>1-3. Passive restraints have proven to be of great value in saving the lives of both those who are alcohol impaired and those who are not. Physical safety protects everyone in society and is not judgmental. In New Mexico injury prevention programs, the most consistent factor improved in health education has been the use of seat belts (May, 1989b).</p> <p>4. Road engineering is a well-developed area where substantial gains can be made if technology is applied to meet local and specific needs. Local advocacy in state government will be improved with local study and community involvement.</p> <p>5. See NIAAA, 1990 (pp. 225-227).</p> <p>6. Western states need to develop exemplary programs in this area.</p>
B. Social Safety Measures	<ol style="list-style-type: none"> 1. Promote designated drivers. 2. Promote "safe ride" programs. 3. Use increased public awareness to recognize and intervene upon heavy and impaired drinkers in various situations before injury or illness occurs. 4. Coordinate social protection programs with bar owners and servers. Mandate, promote, and manage server training. 	<p>1-4. Much can be done with a well-informed population who is willing to insulate or intervene on individual problem situations.</p>
II. Damage in Social Environment		
A. Victimization	<ol style="list-style-type: none"> 1. Promote the public awareness that it is good for all if alcohol problems are reduced. All citizens in society are victimized by alcohol abuse in a number of ways, and it is not only the "drunks" who are victims. 	<p>1. Alcoholism and alcohol abuse problems are public health problems. Therefore, like many diseases, it can affect many people other than the active participants and the rest of society must be protected.</p>

Intervention Area	Specific Recommendations	Comments
	2. Establish and/or strengthen programs that reduce victimization or repay victims. More emphasis on: <ol style="list-style-type: none"> Domestic violence shelters are needed; Al-Anon, Adult Children of Alcoholics, and Children of Alcoholics groups should continue and be strengthened. Victims of intoxicated drivers should be helped. 	2. Victims of alcohol abuse who were not the abusers are found in many segments of society and need help and support.
B. Public Drunkenness	<ol style="list-style-type: none"> Set up mechanisms that keep drunkenness out of mainstream view. Isolating drinking establishments in particular areas, policing them, and gradually improving the atmosphere has been attempted. 	<ol style="list-style-type: none"> Keeping obviously intoxicated from the view of impressionable people insulates their effect or modeling potential. Working to improve or eliminate the problem behavior of those who are drinking in particular establishments or areas should be vigorously undertaken.
C. De-emphasizing General Hostility	<ol style="list-style-type: none"> Heavy drinkers should not be denied normal civil liberties and privileges, except on the basis of achieved behavior such as that described above (e.g., DUI, violence, public and aggressive intoxication). 	<ol style="list-style-type: none"> Drinking itself should not be a source of major stigma when problem behavior is not present. It should be recognized in as early a stage as possible for protection/remediation.

In addition, there is an urgent need for an efficient emergency medical systems in tribal areas. Again, much has been written on this subject (U.S. Surgeon General, 1989b, pp. 180–191; National Committee for Injury Prevention and Control, 1989, pp. 271–282; National Research Council, 1985). The rural nature of most reservations and Native communities in the West presents a unique challenge for emergency medical teams, for emergency room personnel, for citizens (who should receive first aid and initial response training), and for coordination of various agencies and jurisdictions. Upgrading emergency care through grants, personnel, equipment, and training is important. Communitywide cardiopulmonary resuscitation (CPR) training and emergency care might be held in stadiums or in other public settings.

Social measures to reduce alcohol-related risks (Figure 3, Part C) are now becoming popular (see Sleet, 1989). Designated drivers, “safe ride” programs, and increased public knowledge of impairment symptoms are all excellent ways to intervene with DUI and other alcohol-related problems. However, each of the above technologies requires forethought, situational, individual, and social initiative, and in some cases confrontation. However, if these measures gain broad support in a population (including among the retailers of alcohol), they will become easier to pursue. The appropriate parallel here might be the smoking

reduction movement in the United States. For the last 26 years, interventions in the social sector and concurrent support from the media and medical and legal communities have made substantial reductions in the smoking population and have increased smoke-free environments (see Warner, 1981, 1985; Leedham, 1987; Pierce, MacCaskill, & Hill, 1990; DiFranza & Guerrero, 1990).

Damage in the Social Environment

Alcohol problems result in a variety of negative images in the social environment (Figure 3, II A–C). The negative public image often portrayed of Indians and bordertown communities in the newspapers, television, federal reports and even books (see *Anchorage Daily News*, 1988; *Albuquerque Tribune*, 1988) does tremendous damage to the communities and the outlook of those who live there. In addition, a great deal of victimization, hostility, and fatalism are present in communities with alcohol-related problems. Those problems affect drinkers and nondrinkers alike, from theft to loss of life and limb, to negative self-image. Dealing effectively with the magnitude, visibility, and consequences of alcohol abuse will go a long way to reduce all of the above problems. The entire community, however, needs to be convinced of this, so that people may claim ownership of the problem and work toward its reduction. They must give up their acceptance, support and tolerance of an alcohol abusing situation/society.

Once communities have the facilities to support and assist victims, have reduced the visibility and magnitude of the problem, and have begun to see and recognize the positive results of their work, hostility towards problem drinkers will be reduced. Hostility generally does not facilitate treatment and prevention; empathy and objectivity generally do. Therefore, the focus should always be on the welfare, atmosphere, and shared responsibility of all constituents in the community. This is the true public health approach that ultimately benefits all in the community (Beauchamp, 1980, 1990).

Discussion

From the above material one should have an idea of the general approach and the many specific techniques that communities might use for intervening on alcohol-related problems. Prevention policies do not conform to a single model, nor do they focus on a single area of society. They must focus wherever the causes or outcomes might be influenced positively. The three broad areas where this should be done have been covered here in a manner following Moore and Gerstein (1981) and consistent with a number of other summary works (NIAAA, 1990; Room, 1984). These areas are: (1) controlling the supply of alcoholic beverages

and places to drink them, (2) implementing policies aimed at shaping the drinking practices of consumers (when they do drink), and (3) altering the physical and social environment which relate to the consequences of drinking in light, moderate or heavy degrees.

Western U.S. reservations, Native communities, bordertowns, and the major units of health care, municipal, and tribal government within them must undertake a discussion of prevention ideas, policies, and techniques. Paramount in these discussions should be:

1. Are these techniques applicable?
2. Are they in keeping with local opinion and desires?
3. Are they feasible in the form used elsewhere, and if not, how might they be adapted to the specific conditions here?
4. What consensus regarding alcohol nonuse, use, and abuse can be agreed upon to implement these ideas? Can most people agree to work towards a policy that reduces the problems, yet is not polarizing and narrow?

Question number four is the most difficult to answer and to resolve in any community. It might be even more difficult to resolve in reservation bordertown areas, given their multicultural, multiethnic, and multijurisdictional nature. But let us reflect on the words of the Committee on Substance Abuse and Habitual Behavior of the National Research Council in their book, *Alcohol and Public Policy: Beyond the Shadow of Prohibition*, Moore and Gerstein (editors) (1981, pp. 115–116).

In developing and applying the prevention perspective, we have been struck by, and had to resist most forcibly, the tendency to think about policy in terms of opposed pairs: dry versus wet, prohibition versus unlimited access, treatment versus prevention, good drinking versus bad drinking. A clear-eyed examination of current policies shows them to be juxtapositions of different governing ideas. In such an architecture of compromise, it is often the case, as Miles van der Rohe has said, that "God is in the details." We are convinced that the regulation of supply, legal and pedagogical approaches to drinking practices, and interventions in the environment mediating between drinking and certain of its consequences, represent valid approaches with promise for sustained improvement. Each detailed element will fail or succeed only as it is implemented properly and thoroughly; tactics that are undertaken as part of a broad and coordinated approach are more likely to be effective than ones undertaken in isolation.

The building of effective policy thus needs a general vision as well as a fine hand. The vision that we propose is threefold:

- Alcohol problems are permanent, because drinking is an important and ineradicable part of this society and culture.
- Alcohol problems tend to be so broadly felt and distributed as to be a general social problem, even though they are excessively prevalent in a relatively small fraction of the population.
- The possibilities for reducing the problem by preventive measures are modest but real and should increase with experience; they should not be ignored because of ghosts from the past.

Thus, others have gone before us in tackling the problems that are now contemplated here. These general guidelines are useful in reminding us to be open-minded, comprehensive, and coordinated, to pay attention to detail, and to be modest in our positions and expectations.

In terms of implementation there are several suggestions that can be made.

1. Define where your community is regarding knowledge, attitudes and opinions on alcohol policy and its readiness to work for change and improvement. A survey would be of tremendous value here.
2. Develop generalizations that are held by the majority and around which a consensus can be formed.
3. Based on the specific areas of consensus, select specific topics, policy options or techniques that can be pursued and accomplished through study, debate and work plans. For example, if fetal alcohol syndrome is an area of concern and consensus, begin with it. Or, if infant car seats are deemed important, do likewise.
4. Keep community-specific data and records on:
 - a. baseline indicators of mortality, morbidity (sickness and injury), public opinion, and arrest related to alcohol;
 - b. the process of intervention on problems; and
 - c. the outcome (both intermediate and final) or outcomes of positive action taken.
5. Form explicit and positive ties between all constituencies in the community who play a role in the problem. Included should be the legal community, law enforcement, the media, business, government, schools, churches, service groups, families, and others.
6. Emphasize positive programs in the media to keep the public informed and invested.
7. Fine-tune the programs and policies from time to time, for the effectiveness of events such as DUI crackdowns recedes in the long run (12 to 18 months or longer) if the public perceives a reduction in enforcement effort, a reduced likelihood of being apprehended, or less likelihood of being negatively affected by the problem.

8. Be creative. Public policy is not a science and cannot be completely fine-tuned so that it can be totally science directed. Seek new approaches that increase the *probability* of improvement; new, creative policies can be assessed retrospectively as to their effectiveness.

Some detailed literature on local programs might be helpful (Schaefer, 1981; Wallack, 1984–85; Caswell, et al., 1989; Caswell & Gilmore, 1989; Anderson, 1989; Pendleton, et al., 1990).

There are some special issues or pitfalls in prevention that a community must avoid. These issues are very much at risk in western Indian, Native and bordertown communities. Specifically, a comprehensive program must avoid:

- Blaming any one type of individual or group, for alcohol abuse is everyone's problem.
- Championing one particular therapy, approach or ideology over other possible options, for many approaches must play a role.
- Looking for single case, "magic bullet" approaches.
- Polar arguments such as: us versus them; Indian versus non-Indian; or rural versus urban.
- Being coercive with large segments of the nondrinking or light-drinking population by enacting policy that is radically different from the views of mainstream citizens.
- Focusing narrowly on the treatment, incarceration, and processing of chronic alcoholics only.
- Expecting immediate success.
- Expecting "someone else" (e.g., experts, or the federal or state government) to solve the problem for the community.

Instituting a comprehensive prevention/intervention alcohol policy in a community will take a great deal of detailed study, work, and deliberation. It is a complex and complicated task and process. It is also a *contingent* process, that is, one decision will affect many others. Therefore, action in one part of a region will necessitate adjustment of policy in another part. A change in policy in one institution of the region (e.g., legislation) will necessitate an adjustment in other institutions (e.g., law enforcement, media, business, etc.).

One of these larger contingencies surrounds the jurisdictional differences between reservation and nonreservation. Tribal governments must play major roles in a regional planning effort. Tribes have rather exclusive power over their on-reservation laws. They may legalize, prohibit, tax, and in most every way control the flow of alcohol on the reservation. The policy options and resulting alcohol-related behaviors both on and off reservation must be discussed openly. Regardless of what policies are decided

upon, they must be comprehensive, clear, humane, directive, and enforced. It is much more complicated than just “wet” versus “dry.” Here are two general scenarios.

If a reservation or Native village debates freely and chooses to retain prohibition, then the policies of enforcement for violation of the laws and policies must be more clearly defined and direct in their consequences. Enforcement, prosecution, punishment, and treatment must be more certain, swift, and direct to emphasize the consequences of drinking and bootlegging. Off-reservation, the Indian and non-Indian communities must certainly consider the consequences of these policies on the health and welfare of all by adjusting policies to protect all human beings as best they can, given the prohibition policies on the reservations. Bordertowns in a region could choose to vote for prohibition, or may set up a detailed policy that prescribes what behaviors will be acceptable or unacceptable, and which details the consistent and fair enforcement of these standards. Most of the literature on prohibition of alcohol on reservations, however, leads one to the conclusion that it is difficult to enforce on large reservations. Large, dry reservations with relatively simple alcohol policies, in many cases, have alcohol problems of substantial proportions.

On the other hand, if tribal governments choose to legalize alcohol on the reservations, then they must devise a comprehensive, clear, and detailed plan of prescription for what is acceptable and unacceptable behavior by drinkers, servers, owners, and others. Defining what conditions of alcohol consumption will cause the fewest problems must be done by tribes utilizing experience from other human societies. This experience can be drawn from examples from other parts of the world or from other tribal communities, but both the non-Indian and tribal policies will have to consider many items including:

- how to disperse alcoholic beverage licenses throughout reservations and other towns to decrease driving distance and therefore DUI;
- how to encourage and enforce moderation in drinking among those who drink;
- environments and norms of drinking that neither promote nor allow violent, aggressive, or antisocial behavior among those who drink; and
- how to minimize the health, social, and behavioral consequences of drinking.

A variety of effective policies can be instituted in most any setting, whether it is among tribal or nontribal communities. Alcohol abuse is a human issue that has been faced by thousands of communities over the

years throughout the nation and the world. While it is popular to think that Indian reservations, cultures and bordertown communities of the western United States are unique and require totally new and special approaches, this is not a productive assumption. The situations, structures, and conditions of the West are very similar to those in other parts of the world and nation. Yes, the West has a different flavor to it, but the points of influence (laws, policies, health care, etc.) are similar.

One final guiding idea is certainly appropriate here. It comes from the book *Drunken Comportment* by MacAndrew and Edgerton (1969).

On this note, we conclude what we have to say on the subject of man qua drunkard. The moral of the piece — and there is a moral — is neatly exemplified in the following anecdote, which dates from the England of the early 1600's. The story goes that not long after James I acceded to the throne, a certain English nobleman gave a dinner party to which he invited a large number of luminaries. After the goblets had been filled and refilled several times and the liquor had taken hold, an English general named Somerset rose from his chair and proclaimed: "Gentlemen, when I am in my cups, and the generous wine begins to warm my blood, I have an absurd custom of railing against the Scottish people. Knowing my weakness, I hope no gentlemen in the company will take it amiss."

Having thus delivered himself, he sat down, and a Highland chief, one Sir Robert Blackie of Blair-Atholl, rose and with singular dispassion addressed his fellow celebrants as follows: "Gentlemen, when I am in my cups, and the generous wine begins to warm my blood, if I hear a man rail against the Scottish people, I have an absurd custom of kicking him at once out of the company, often breaking a few of his bones in the process. Knowing my weakness, I hope no gentlemen will take it amiss."

The story concludes, we need scarcely add, that General Somerset did not that night follow his usual custom of denigrating the Scottish people.

The moral, then, is this. Since societies, like individuals, get the sorts of drunken comportment that they allow, they deserve what they get.

In this anecdote the Scottish chief stated clearly what behavior he would or would not allow, and defined the consequences. Individuals and communities are clearly able to do this in their own settings. If done, then we should all see an improvement; some will benefit more than others, but all will experience an improvement.

Conclusion

No further summary of the foregoing will be presented here, for this entire document is a brief summary of a vast amount of academic

literature. It may well be too brief, for there is danger in reducing a complicated issue such as this. Yet there is virtue in brevity as the following quotes indicate. Brevity is:

Words that cover more ground than they occupy.
— Anonymous

The next best thing to silence.
— Anonymous

Almost a condition of being inspired.
— George Santayana

One hopes that this paper has covered all necessary ground, has not been too long, has inspired the reader, and will assist a number of leaders and communities in positive public health initiatives. Yet there is danger that the topic has been oversimplified. The reader is encouraged to consult other, more detailed treatments of any of the subjects related here. Many additional references have been provided for further reading, and each of them, in turn, has a long list of other references that may also be consulted. All of this search is a worthy endeavor. It represents a task that may at first complicate matters, and possibly extend confusion and lengthen deliberations over alcohol policy and programs. But ultimately, as communities become more knowledgeable and experienced with these public health approaches, some success, brevity and closure will occur in a number of the areas discussed here. Then the following quote will ring true:

Not that the story need be long, but it will take a long while to make it short.

— Henry David Thoreau

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NATIVE ALCOHOL POLICY OPTIONS. YOU'VE BEEN GIVEN A MAP: BLAZING A TRAIL IS UP TO YOU

RON PETERS, M.A.

Dr. May has performed a valuable service by giving us a general framework for conducting communitywide dialogues on alcohol abuse and dependency. His framework covers general planning principles for how these dialogues should proceed and maps the policy territory to be covered along the way in broad, but useful, strokes.

The principles he outlines are essential ones. Natives are an extremely diverse people: historically, politically, economically, socioculturally, demographically, and in terms of urban-rural differences. This diversity finds its natural and necessary reflection in the Native nations' styles of living and dying. Thus, Dr. May warns severely against the myth of the one-shot quick-fix and the lure of the "magic bullet." Diversity is best served by a well-coordinated system of broadly based community approaches and by an evolutionary, not a revolutionary, perspective. As my friend Dr. Ralph Masi (of the Canadian Council on Multicultural Health) says, although all people may be created equal, they are certainly not created the same. Thus, when one treats people the same, one treats them unequally. Responsive and useful service systems can only emerge from a sound base of consistent policy that is informed by and consonant with local needs. This takes time, effort, goodwill, and motivation, which are things the community itself must provide. But it also requires a framework and some guiding principles, which is what Dr. May has provided.

Equally important is his emphasis on entire communities, starting (not ending) with primary social groups and branching out to include broad sectoral representation. Mental health service providers must face up to a basic fact: far from being the first choice, we are most often the last resort of Native peoples who have serious alcohol problems. We must ask ourselves why this is and what we can do about it, but we must also learn to meet the world as it is halfway. Friends, family, extended family, and a host of other community gatekeepers are the real front line for Natives with serious alcohol problems. Effective planning efforts must be oriented around this basic fact as a primary referent or fail.

As an example, a few years back I helped to conduct an assessment of the mental health needs of Native youths in Vancouver, Canada (Peters, 1987). This included talking with American Indian parents and older teens about things like their definitions of mental health problems among youth, and asking them to name the kinds of helpers they would turn to if such problems were identified. When asked where they would turn to for help, outside of family and close acquaintances, the number one answers were "call the police" and "phone the welfare office." Psychiatrists and public health facilities tied for last place in the list of options identified by American Indians themselves. This is the community as it actually is, and so it defines our point of entry for opening dialogues with and among Natives. There may be elements of the community that we would like to see changed; there most definitely will be things that the community wants to see us do differently. In other words, effective change in this area must involve a process of mutual accommodation.

Equally then, in terms of sectoral representation, it must be recognized that school teachers, police officers, welfare workers, elders, Native government representatives, and other human service providers effectively control important resources that are needed to tackle the entire problem of Natives challenged by alcohol. These other stakeholders, our partners in planning, must also make changes that complement and supplement those made by mental health service providers, accommodating their services (and if need be their mandates) in ways that lead to effective total solutions. New types of "mid-way" roles — service brokers and expeditors, coordinators and facilitators of mutual education — are badly needed as catalysts of change in these areas.

Dr. May mentions Alkali Lake as an example of a successful community response to problems with alcohol. Certainly, indigenous peoples from around the world have visited there to look at their programs. Again, though, it is the principles involved in how this community proceeded to tackle its problems that are transferable, not the particulars of their response. Alkali happened to go "dry" and reports a 95% success rate, but this may not work for everyone. In addition, the people at Alkali Lake have come to realize that their community faces many other challenges besides alcohol, and so have more recently begun to consider how they can deal with concerns such as widespread family violence.

Another good illustration comes from the work of Dr. Jack Ward at the Manitoulin Island reserve in Ontario (Ward, 1979). Dr. Ward was approached by the Native leadership for consultation following an epidemic of suicides and other violent deaths among youths in this small rural community. Nearly all of these deaths involved concurrent alcohol abuse or dependency. In working with the community leaders, the problem was defined not as involving an isolated psychiatric concern, but as

a symptom of a broader community malaise requiring a total community solution. Community involvement, commitment, and consensus were the keystones of the planning process. Eventually some counselling positions were created, but the main thrust of the communitywide response centered on such things as promoting alcohol-free cultural events, arranging opportunities for bringing youth into social contact with elders, organizing after-school recreational opportunities, and developing preventive educational programs and Native cultural content for the school curriculum. The focus was not, therefore, solely on suicidal behavior, but equally on related public health concomitants and broader cultural and community development approaches relevant to primary prevention. These activities were planned and implemented by the community, without, as it turned out, one cent of government funding.

On follow-up, the results included: decreased rates of suicide and other forms of violent death; decreases in suicide attempts, arrests and convictions; smaller numbers of youth on probation; and a lower school drop-out rate. We need to learn from these successes, and Dr. May provides a good overview of the planning principles that must be followed for this to occur.

The emphasis that is given in Dr. May's paper to a public health perspective is also of great importance. Ideologically, it takes us out of the "blaming the victim" mode that has historically characterized policy and planning around the topic of American Indians and alcohol use (Ryan, 1976). Psychologically, it broadens the scope of our thinking from a fixation on the individual Native person who is "broken" and needs to be "fixed" (true as this may be) to include the broader social-structural factors and processes within whole communities that are directly linked to root causes. Practically speaking, it provides the only realistic framework for implementing the kind of broad, multisectoral, communitywide policy and programming that is needed to address the entire problem.

I would also like to especially reinforce Dr. May's repeated references to the need for local needs assessment and information on evaluative outcomes. Native alcohol abuse is a topic fraught with emotionally laden, insistently held, and diametrically opposed views. However, in terms of knowing what works, for whom, under what circumstances, it is also an area where (considering the size of the literature) we are surprisingly information-poor. Dr. May has done a good job of sifting through the literature to point out and evaluatively comment upon some of the more useful and consistent findings.

However, in the absence of practical, objective local data on needs and outcomes, the debate can only continue on an emotional and philosophical plane. As Dr. May points out, at the local community level such debates often get deadlocked on the "wet-versus-dry" issue. When

this happens, both sides dig in their heels and all real communication grinds to a halt. The great danger here lies in how this can be expected to affect decision-making about funding. The emotions and the value-orientations expressed on the subject of alcohol within Native communities are real and valid enough in themselves. Yet when no better basis is available, funding decisions will necessarily be made on a purely political basis. This, in turn, will often have little or no bearing on what is actually needed.

I haven't spent much time here on Dr. May's mapping of the policy territory involved, which is, after all, the main substantive content of his paper. Suffice to say that this ground is ably covered, and the real responsibility for filling in any remaining gaps lies with each of us in trying to put his framework into action in our own communities. You have Dr. May to thank for the fact that you now have a good map of the terrain. It's up to you to decide on the best route for blazing a trail.

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ALCOHOL POLICY CONSIDERATIONS IN AMERICAN INDIAN COMMUNITIES: AN ALTERNATIVE VIEW

DWIGHT B. HEATH, PH.D.

Dr. Philip May has provided an unusual and valuable public service on behalf of the American Indian and Alaska Native populations and of all who are concerned about the impact of alcohol on public health and social welfare. His article on alcohol policy considerations for Indian reservations and bordertown communities in this issue can be a valuable tool. We also should be grateful to this journal for making it available, together with comments by colleagues.

As a professional who has conducted both intensive and extensive research on alcohol and Indian people for several years, May is well qualified to evaluate the epidemiological data. As a sociologist whose work has often been cast in terms of practical implications rather than theoretic or conceptual issues, he is skillful at relating those data to a variety of alternative policies. In addition, as a writer who has worked closely with various American Indian groups, he has succeeded at the difficult task of being an effective broker of information; he has offered a broad survey of the diverse and widely scattered literature, digesting the sometimes complex and highly specialized findings, and "translating" them into clear, concise, and usable terms for readers who may not have familiarity with academic or scientific approaches to the subjects of alcohol and Indians.

I am in hearty agreement with the greatest portion of Dr. May's article. I admire the way he has touched on so many important points, explained them neatly, and realistically offered "the ingredients for a comprehensive policy," while emphasizing that "each community needs to work out its own recipe."

In a very real sense, there is nothing in his article with which I seriously disagree, nothing that I consider incorrect or irrelevant (Heath, 1983, 1987, 1989). In another sense, however, I find it somewhat frustrating. I must confess to having some minor concern about the overall balance of the piece, especially with respect to recommended policies. There were many places in the paper where I wanted to say, "Yes, but . . ."

It could even be said that Dr. May and I would list the same ingredients in an article, although perhaps in slightly different order. It is not that we

disagree; on the contrary, I would rather have Dr. May more strongly defend his convictions. For example, although he has been careful throughout most of the paper to leave it to the reader to choose among alternatives, there are a few points on which he takes a clear stand. One of the most striking is his assertion that *"the most profound and permanent social changes in public health occur from value and behavioral shifts in primary social groups"* (p. 11, italics in original). I completely agree. Yes, but how I wish that the rest of the paper reflected that fact.

With such a realization about how meaningful changes occur, one might expect that among policy options, the section on "education, information, and training" would be given the most attention. After all, Dr. May earlier wrote, "given the current scientific evidence, both the causes and solutions of alcohol abuse problems in an Indian community lie in the social and cultural realm of the Indian community itself, the subcultures within it, and the social structures in the surrounding region" (pp. 7–8). He even introduced his paper with examples of how inaccurate beliefs about drinking interfere with prevention and treatment approaches in many Indian communities.

However, when it comes to describing policy alternatives, he devotes fully 10 times as much space to the category of "controlling the supply of alcoholic beverages through statute and regulation" as he does to "shaping drinking practices directly." Dr. May is correct in writing: "Probably the most common and agreed upon approach to minimizing alcohol-involved problems both past and present among all human groups, has been controlling the availability of alcoholic beverages" (p. 27). Yes, but how successful has that approach been? He himself outlines some of the problems that have occurred with prohibition on Indian reservations; even prohibition appears to have been the choice of a majority of members of the local community. He mentions, for example, bootlegging and the use of other more dangerous substances as intoxicants.

Some other dangers of prohibition that May did not mention are cited by Waddell (1990) among the Papago (or O'Odham): the pattern of quick consumption (resulting in rapid and sometimes dangerously high blood-alcohol levels); greater risk of accidents, police action, etc.; profiteering by bootleggers and disproportionate expenditures by Indian drinkers; as well as considerable conflict within the community. One of the few systematic studies that compares drinking patterns among Indians of various tribes and location noted: "The persistence of prohibition as a tribal policy on a majority of the Indian reservations is in contrast to widely held and longstanding opinions that the policy (1) does not work [with references . . .], (2) contributes to the problem of high rates of alcohol abuse among reservation Indians [more references . . .] even in the wake of research findings that neither prohibition nor its repeal significantly

changes Indian drinking behavior [yet more references . . .]” (Weibel-Orlando, 1990, pp. 295–296). By comparing Navajo, Sioux, Five Civilized Tribes, and indigenous California Indians in both rural and urban settings, Weibel-Orlando demonstrated that those living on “dry” rural reservations generally drink more, and also drink more often, than those in the “wet” cities. She concluded: “Reservation prohibition remains an essentially ethical stance rather than an effective social policy” (p. 318). A similar estimate has been made about prohibition in many other areas where it has been tried. This does not mean that prohibition is meaningless — an ethical stance can be symbolically important — but it would be sad for a community to embrace prohibition expecting it to be an effective policy.

In his more rigorous doctoral dissertation, May (1976) himself demonstrated that alcohol-related rates of mortality (including liver cirrhosis, alcoholism, suicide, homicide, and traffic fatalities) were generally higher on reservations with prohibition than on those without; the same was true of alcohol-related arrests. Others have found the same pattern while studying other Indian groups (e.g., Stull, 1973; Wiebel-Orlando, 1990), prompting one researcher to generalize: “Prohibition may have had some beneficial effects, but in general has not been very effective in containing the problems of alcohol abuse and alcoholism in Indian communities. In fact, there are those who claim it has made the problem worse” (Moss, 1979, p.1). The smuggling, moonshining, and related lawlessness that grew out of the United States’ “noble experiment” with nationwide prohibition have led most to view it as a failure; other prohibitions in Canada, Finland, Iceland, India, and China have similarly been repealed as not only ineffective, but actually more harmful than regulated availability. Recently, the Soviet Union gave up after a brief experiment with limiting the availability of alcohol (Heath, 1991). Ironically, among the Navajos, I found almost no change in drinking patterns after the repeal of federal prohibition (Heath, 1964).

Of course, there are many kinds of restrictions or controls less drastic than total prohibition. Increased taxes and prices are mentioned by Dr. May and are being widely recommended by the United Nations’ World Health Organization. Yes, but recognizing how much people will pay a bootlegger suggests that increasing the cost of alcoholic beverages through legal channels might be more likely to hurt the family budget of heavy drinkers than to help them. Similarly, on a community level, such a policy might increase poverty and all the associated problems of public health and social welfare.

Restrictions on advertising are mentioned as another regulatory control that might result in fewer alcohol-related problems. Yes, but as May indicates, research has not demonstrated that advertising affects drinking. Perhaps more to the point, we certainly know that glue- or

solvent-sniffing, and abuse of lysol, marijuana, cocaine, heroin, and other substances are not the result of advertising. The experience of American Indian communities is not unusual in this respect; major portions of eastern Europe and Scandinavia, both areas where alcohol abuse is a big concern, have long forbidden the advertising of alcohol, and the use of hard drugs flourishes in both the United States and Canada despite both prohibition and a total absence of advertising.

Increasing the minimum age for the legal purchase of alcoholic beverages is supposed to keep young people from drinking. Yes, but we have all seen (and researchers confirm) that too often adolescents drink anyway, in more dangerous ways than they would if it were legal and with a spirit of risk-taking and bravado that tends to be associated with many other kinds of problems. In contrast increasing the minimum age for legal driving is an unusual, but promising, suggestion, perhaps more justified because of the way in which unskilled driving endangers so many people.

The variety of options that Dr. May offers for “reducing the physical, social, and environmental risks” are all worth trying, although in this connection I would underscore his warning that none of them, singly or in combination, should be expected to have a major impact in changing patterns of those individuals who already cause problems for themselves and others because of how they drink and behave “under the influence.”

All these comments about the limitations on the effectiveness of the options offered by Dr. May should not be interpreted as saying that nothing can or should be done. Just the opposite. My point is that, although “the control model” we have discussed above appears to hold little promise for many Indian communities, “the sociocultural model” that he mentions only briefly may hold more promise and deserve more attention (Heath, 1988). In most of what is written about alcohol policy, little is said about all those cultures around the world where alcoholic beverages have long been easily available and where there have been few “alcohol-related problems” (Heath, 1982). Portugal, Spain, Italy, and Argentina are some of the countries with the highest average consumption of alcoholic beverages in the world by both sexes and all ages, with low taxes on alcohol, many outlets open day and night — and yet they have relatively low rates of almost all of the so-called “alcohol-related problems” that are reported at high rates in many Indian populations.

The answer, of course, has to do with the major point made by MacAndrew and Edgerton (1969) to which May refers repeatedly: “drinking patterns can be shaped and so can behavior of those under the influence” (p. 10). The quest for consensus, the focus on problems rather than on drinking in itself, the concern with community and not just individual drinkers, and the appeal to recognize and define “safe drinking practices” are all important and positive recommendations that Dr. May

offers. Similarly, he has suggested that Indian communities shift their focus of attention from "alcoholism" to "alcohol-related problems." Yes, but why not shift it a little more, to encompass many other kinds of dangerous, risky, and unhealthful behaviors? Or, to put it more positively: why not put more emphasis on safer, risk-avoidant, and healthful behaviors.

Such a shift is not unrealistic; larger and more heterogeneous communities have worked at it for years. The heart-health program in Farmington, Massachusetts, has grown for almost 50 years and now involves most of the population in exercise, reasonably nutritious eating, safe work and play habits, and many other patterns that have significantly reduced both mortality and morbidity from many causes; many other communities have shorter but similarly encouraging experience. A brief explanation of the model is discussed by Rootman (1985), and a few communities are recently beginning to experiment with a similarly broad community-based approach, using alcohol and drugs as the focus (Giesbrecht, Conley, Denniston, Glicksman, Holder, Pederson, Room, & Dhain, 1990).

Dr. May is quite correct in attributing the popularity of "the control approach" partly to the broad appeal of a "magic bullet" or quick and easy solution. He also is right in suggesting that it fits with the inclination of many people to rely on "the authorities" to solve whatever problems may arise.

The main point of his paper is that there is no simple answer, and he is right in stressing that there is no single solution that would be appropriate for all Indian communities. Yes, but there is ample evidence that education can and does change beliefs and behavior in ways that can significantly improve health and welfare. The reason many people put little faith in education is that they take a narrow view that includes only what goes on between teacher and child in the classroom. But education is an ongoing process that can — and should — involve people of all ages, regardless of their work, social status, or tribal, religious, or other affiliation. It is a process that can be carried out by anyone, no matter how little schooling they have. And it is a process that ought to reflect the attitudes, values, and norms that are important to the community.

Dr. May says that communities must work to define and clearly communicate what alcohol-related behaviors are totally unacceptable and those that will be allowed. Yes, but why not drop the word "alcohol-related" and work to define and clearly communicate what behaviors — in *all* respects — are totally unacceptable and those that will be allowed? It is not so much the alcohol that constitutes a problem. Neither is it the drinker. The problem is (and the problems are) what people do or don't do. Most of what we find objectionable "under the influence" would be just as objectionable in a sober person.

This brings us back to Dr. May's recurrent theme, derived from MacAndrew and Edgerton (1969), that we ought to pay more attention to keeping people's behavior "within limits," following the rules of the game.

The integration and beauty that so many people around the world admire in American Indian cultures is not just a romantic image that predates the introduction of alcohol. It is an image well documented until very recent years in many Indian communities of a harmony that was firmly grounded in consensus about what is right and what is wrong. It is not naive to hope that some such state can be achieved again if people work toward it. Obviously, the situation is not yet hopeless, or people would not so actively be searching for options.

An approach to health promotion, involving traditional values as well as new media and involving old as well as young, food as well as drink, work as well as play, norms about what one should do as well as what one shouldn't, and so forth, can be the basis for real changes that could become both broad and deep. It is just such "value and behavior shifts in primary social groups" that Dr. May referred to as the basis of "the most profound and permanent social changes in mental health." I applaud this effort on the part of Dr. May and many colleagues to discuss with American Indians the ingredients of change, and hope that this alternative viewpoint may highlight some of those ingredients that might otherwise have attracted less attention.

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COMMENTARY ON "ALCOHOL POLICY CONSIDERATIONS FOR INDIAN RESERVATIONS AND BORDERTOWN COMMUNITIES"

ARON WOLF, M.D.

The positive thrust of Dr. Philip May's thesis, "Alcohol Policy Considerations for Indian Reservations and Bordertown Communities," is certainly a breath of fresh air in approaching this very important and multifaceted issue. My comments on these issues will be from the standpoint of someone who has worked in the Alaskan mental health community for more than a quarter of a century. My involvement has been both urban and rural, as well as treatment, forensic, and research oriented.

American Indians and Natives in Alaska do not have the jurisdictional issues of the reservation and bordertown to deal with. The alcohol consumption and alcohol policy-related issues, however, are very similar. Alcohol morbidity and mortality rates for Natives in Alaska have been and continue to be significantly higher than the national average and the average for non-Natives (Kraus & Buffler, 1977).

May makes a specific point in the introduction that Indians, as an ethnic or as tribal grouping, are no more or no less susceptible in the biophysiologic sense to the ill effects of alcohol abuse than non-Indians. May seems to be approaching this issue from an "all or nothing" standpoint.

The "blackout" literature (Ryback, 1971; Goodwin, Crane, & Guze, 1971; Holmberg & Martens, 1975; Fenna, Mix, Schaffer & Gilbert, 1971; Zucker, Austin, & Gilbert, 1971) shows that American Indian people metabolize and react to alcohol in a *different* manner, which is no better and no worse than other peoples. The Alaska Native populations (Philips, Wolf, & Coons, 1988) show much less liver and cortical pathology (the DTs) than other groups of individuals who have similar drinking histories. However, a significant proportion of these individuals show a very early propensity toward "blackouts" whenever they drink to the threshold level.

Our own review and research in the area (Wolf, 1980; 1984) show that violent and antisocial behavior may accompany these blackouts with an alarming frequency. Our data show a prolonged rise in blood alcohol to extremely high levels, which are then maintained for a long period of

time even after ingestion has ceased. The behavior of individuals in this state is basic and almost "reflex," stemming from lower brainstem activity. Thus, their behavior within a "blackout" is not under cortical control. May quotes MacAndrew and Edgerton (1969) that "most behaviors of people are under the influence of learned, socially determined behaviors." This is certainly true as long as an individual has conscious access to these learned behaviors. The "blackout" situation is significantly different in that these individuals do not learn new behavior, and their reactions are controlled by centers in the Amygdala and the red nucleus of the lower brain. These same centers have also been found to contain the loci for rage reactions. The inability to consciously determine or remember one's own behavior certainly has major implications in devising an alcohol policy for a population that contains susceptible individuals.

May also emphasizes a number of extremely thoughtful ideas relating to drinking and driving. However, this issue is significantly less important in Alaska, where many of the Native villages are not connected by roads. The Alaska statistics for morbidity and mortality of Natives in automobile accidents is extremely low due to the lack of roads. It is interesting to note, however, the high incidence of snowmobile, three-wheeler, four-wheeler, and riverboat accidents that involve alcohol in these same populations. The issue of dealing with motorized vehicles is the same, but the solutions must be tailored to special circumstances.

May indicates in the introduction that suicide is a major problem area that has been identified as secondary to alcohol abuse. However, he does not address this issue in the body of his paper. He also does not mention assault, sexual assault, and homicide, which in Alaska are major problems for the Native population secondary to alcohol consumption. The Kraus and Baffler (1977) studies, as well as a more recent and as yet unpublished study by Kettl from data at the Alaska Native Medical Center, show that 98% of the suicides of Native individuals in Alaska are alcohol related. Natives are also over represented in our correctional system by 200%. Natives account for 18% of the population and 33% of the corrections population. More than 90% of these individuals committed their crimes under the influence of alcohol (State of Alaska, 1990). In one correctional institution, a survey in 1988 by our staff of Native prisoners shows that 76% of them had committed their crime during alcohol ingestion and "blackout" episodes (Alcohol Amnesiac Triad and Violence, Aron Wolf & Bruce Smith, June 1988 Presentation, Department of Corrections). The assault to oneself or others when drinking, along with the special problem of teenage "epidemic" alcohol-related suicides, certainly must be strongly addressed in any comprehensive schema relating to alcohol.

The State of Alaska has been forward-thinking in relating to the "all or none issues" of alcohol in any given community. The 1981 *local option law* has allowed any community to vote on its degree of "wetness." The options that are available are "wet," in which alcohol may be sold and consumed; "damp," in which alcohol may be brought in (in limited amounts) for personal consumption but may not be bought; and "dry," in which alcohol may not be bought or consumed within the area. Strict penalties such as confiscation of the airplane bringing in the alcohol as well as jail terms and fines are all a part of this option. To date, only a handful of villages have opted for the "dry" option. These villages have also maintained a very strong cultural heritage.

The majority of largely rural, largely native communities have opted for the "damp" option. In a large number of the rural Native communities, this has spawned a fairly aggressive bootlegging trade. One-fifth of such bootlegged alcohol may very well sell in excess of \$100 per bottle. The prosecution of the bootleggers has been inconsistent, for in many cases, they have been aided and abetted by influential leaders in the community, both Native and non-Native. Despite the bootlegging, and the fact that these areas are much more "damp" than they ought to be, the statistics show that the amount of morbidity and mortality decrease significantly when an area goes from "wet" to "damp."

The City of Kotzebue has voted itself "wet" and "damp" several times since the passage of the law. In 1989, they once again voted themselves "damp." The Kotzebue area hospital reported in an article in *The Anchorage Daily News* (1989) that the number of trauma cases in the 90 days after the changes was 65% less than in the previous 90 "wet" days. For Alaska, we must "stir in" this "wet-damp-dry" statute into the patterns that are available to each and every community in the state.

May emphasizes the public health approach, which indeed is comprehensive and considers primary, secondary, and tertiary prevention. The communities of Alaska, both urban and rural, are undergoing massive change. The changes for rural Native communities include the issues of subsistence and cash economies, regional and local Native corporations, the influx of "Western," non-Native goods, products, and food, and the lack of meaningful job opportunities during much of the yearly cycle. These problems are far-reaching and very complex. They should certainly not impede the development of a community plan to deal with alcohol, but they must be considered as part of the fabric of that plan.

Despite the fact that there are some specific needs for Alaska and some specific issues that I felt that May might have further emphasized, I would heartily agree with his communitywide public health approach to the alcohol issue. As such, I shall comment on his major points of policy. It certainly seems relevant that regulating the supply of beverages is an

essential factor. The urban areas of Alaska have one of the highest per capita alcohol purchase and consumption patterns in the United States. Recent federal tax increases have not made a significant impact on this volume, and state or the local communities would need to raise the taxes significantly to impact this flow. Urban communities function as the "stores" for the "damp" communities. In the past, a resident of a rural community could order alcohol over the phone from an urban community and pay for it by cash, credit card, or cash on delivery (COD). Recently, the COD option was abolished which has indeed cut down the flow of alcohol somewhat into the rural communities. The change from "wet" to "damp," with any immediate availability to alcohol being through the bootleggers at very high prices, indeed restricts the amount of alcohol, especially in communities with limited cash economies.

Alaska's urban and "wet" communities are the "Land of Many Bars." These bars had been able to stay open 21 hours a day. In the last several years, Anchorage, Fairbanks, Juneau, and Nome have restricted their openings to 18 hours a day. Even this minimal restriction has cut down on trauma, including DWIs. The state as well as local areas have been trying to restrict the number of liquor licenses outside of eating establishments. There is a celebrated case in the courts at the moment in which the bar and package store at Red Devil, an old mining encampment, was finally closed after a series of drunken plane crashes.

In 1986, Alaska raised its drinking age to 21, as did most other states. In the rural areas, however, most motorized equipment, snow-machines, three- and four-wheelers, and boats do not presently require a license. The issue of licensing for the operation of these machines might be encouraged, since the teenage population both drinks and drives these machines with the same traumatic results as the drinking/driving teenagers in the lower 48.

Alaska does not, as noted above, restrict the choices to prohibition vs. legalization. "Local option" means just that, with each village or town being able to vote its option. The option may be reconsidered by an annual referendum. The decision to opt for "damp" or "dry" are thus grass roots decisions that must originate with a petition of 10% of the voters and pass in a general election by two-thirds of those voting. One major inconsistency has been the local handling of bootlegging in the "damp" communities.

May considers a number of other issues. Young rural village youngsters have engaged in inhalant abuse for many years. This issue as a public health problem needs to be addressed on its own. There does not, however, seem to be any increased use of inhalants in "damp" or "dry" areas by the adult populations.

Advertising limitation is certainly a partially workable idea in Alaska. The local print and broadcast media are limited, and pressure could be brought to monitor alcohol advertising. The television input to many communities, however, is through the Rural Alaska Television Network, which provides direct satellite down-links to 30-plus of the national satellite cable networks. Pressure might be brought upon the State of Alaska to "jam" or delete alcohol advertising, but this certainly would be cumbersome.

May's five behaviors for safer and appropriate drinking are all excellent for both urban and rural Alaska. They certainly enhance and expand the present local options that are available to these communities.

As a director of a treatment program, I can only echo May's plea for an increase in the availability of treatment programs and in the degree of their flexibility using all of the modalities he has mentioned. For the Native populations receiving treatment, the biology, dynamics, and symptomatology associated with "blackout" must be included as an educational facet of all of these programs.

May also clearly outlines the damage in the social environment in terms of victimization, as well as the acceptance and support of alcohol abusing situations. The mobilization of communities to readdress this situation is crucial. Although many Alaskan communities are in a period of major transition, they cannot afford to accept alcohol abuse as an acceptable cost of these transitions.

Alcohol use and dependence by Alaska Natives is the prime public health issue. This is true in the rural, predominantly Native villages, as well as in urban areas that have the characteristics of the bordertowns of southwest Alaska.

The State of Alaska has spent millions of dollars for public alcohol programs without stemming the problems. The only dents to this rising tide have been in those areas where the village tribal or town councils have spurred communitywide decisions to go "damp" or "dry." A wider association and agreement approach by Native as well as non-Native leaders would add a strength that would encourage more villages and towns to begin the appropriate steps.

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THE NEED FOR COMMUNITY CONSENSUS AS A CONDITION OF POLICY IMPLEMENTATION IN THE REDUCTION OF ALCOHOL ABUSE ON INDIAN RESERVATIONS

FRED BEAUVAIS, PH.D.

If I did everything I know I'd be nearly perfect.

The Complexity of Drinking Behavior

Dr. Philip May has done an excellent job of reminding us that a great deal is currently known about the conditions that moderate drinking behavior. Furthermore, while recognizing that there are certainly unique cultural considerations surrounding the use of alcohol among Indian populations, May effectively argues that much of what has been learned elsewhere can be brought to bear on alcohol policy on reservations and in bordertowns. There is no doubt need for more research and a search for creative and culture-specific solutions; however, this quest should not take the place of applying what we already know to be effective control measures.

A further important point emphasized by May is the extremely complex nature of alcohol abuse and the necessity to respond with equally complex and comprehensive policies. Indeed, May's paper lists 81 separate and specific measures that can be taken immediately to reduce the harm of alcohol abuse in Indian communities. It is quite likely that if a significant number of these interventions were implemented in a comprehensive fashion, considerable change could be effected. It is not enough to engage in limited prevention programs in the hope that somehow these will permeate the community and alter deeply entrenched patterns of behavior. This narrowness of focus is perhaps one of the shortcomings of the grant and demonstration project framework of the recent past, where programs of limited scope and minor potency are encouraged with the expectation that major reductions in substance use will ensue.

It is promising that several federal grant-making agencies are now calling for "community partnerships" that require participation by many segments of the community. There is, however, a fear that such "partner-

ships" will spend most of their time organizing and that they will only reinvent the limited programs used in the past. These community programs need to be pushed into assessing the local applicability of May's 81 measures as a first step in prevention planning.

Seeking Consensus

The call for broadly based interventions brings to the fore the question of community cohesiveness and the ability to reach consensus on the shared values that are to be reflected in policy. It is this aspect of May's paper that I found the most intriguing, yet I do not feel that it was given sufficient emphasis. He certainly recognizes that the process of finding and expressing common values is essential. At one point, he states: "the bulk of the positive changes and permanent results will eventually occur in primary social groups (e.g., family and church) and will not emanate directly or completely from formal institutions. The formal structures are there to assist, and in some cases to nudge, the primary institutions. As such, the most profound and permanent social changes in public health occur from value and behavior shifts in primary social groups."

Despite this statement, I did not get a sense of how May sees this process as coming about. How does a community elucidate and communicate common values, such as those that permeate family life? Furthermore, the text moves quickly from this discussion to a general discussion of regulations that could be adopted to alter individual behavior. It appears that the emphasis is being placed on regulatory measures with insufficient attention paid to individual and group dynamics.

We are left wondering whether change in drinking behavior is due to internal factors (i.e., newly discovered or activated knowledge, beliefs, and values) or external factors (i.e., environmental or regulatory manipulations): this is an old question that likely has a lot to do with the differing biases of sociology and psychology. It is probably best at this point to heed another piece of May's advice and not cast the issues in an either-or, black or white mold and to recognize that the real answer is that change involves a combination of both internal and external forces.

While I am sure we are in agreement on this, May's emphasis on implementation of policy and regulations leaves one-half of the equation inadequately explored. Several examples were used to demonstrate how policy changes can lead to changes in individual behavior, the strongest of which is the radical changes in smoking behavior over the past 20 years. One must ask, however, if these changes would have occurred without the massive efforts to alter individual behavior through education and promotion of changes in values and attitudes. A further important

question needing to be answered is how do individuals or communities respond to policies that are at variance with their personal beliefs and values? Alternately, can policy change lead to changes in individual behavior if there is no personal motivation to change? At a more philosophical level, how far can or should policy be pushed before there is a backlash based on infringement of individual rights? Underlying these and other similar questions is the search for barriers that prevent adherence to policy. On most reservations today there are very extensive policies regarding alcohol use, yet there is also a clear lack of compliance with these policies. We would do well to understand why past efforts to moderate drinking practices through policy means have been ineffective.

The Consensus Process

A further area needing attention is the process by which communities reach consensus regarding alcohol issues. There are several levels at which consensus must be achieved, ranging from "peer clusters" of drug users (Oetting & Beauvais, 1986) to families and tribal councils. May makes it quite clear that consensus-forming processes must occur, but also recognizes the practical impediments often encountered in Indian communities. The fact that alcohol has been the cause of such widespread illness and injury over the centuries has left a residue of very strong negative feelings and often uncompromising and rigid positions on specific issues. Add local politics, which are often rancorous, to the resistant forces, and negotiation over strategy is difficult. (It has been my experience, by the way, that these "politics" are typical of many small rural towns populated by families of long-standing residence and have little to do with Indian culture per se).

The fundamental question here is how to achieve a community "buy-in" so that community members have an investment in whatever decisions are made. Several hundred years of history have shown us that implementation of policy from the outside has not worked. We need to understand the dynamics of decision-making in Indian communities to assure ultimate compliance with chosen policies.

The Role of Indian Culture

The richness and salience of Indian culture can provide a marked advantage when community members gather to explicate what values and behaviors will be sanctioned. In fact, in these times of revitalization of Indian culture, significant gains are being made in rectifying social ills. May has mentioned the important work being done by the Four Worlds Foundation in Canada. In addition, there are many more examples of

grass-root, communitywide, regional and national groups grappling with the meaning of Indian culture and how it can be used to counter the effects of alcoholism and the use of other drugs.

It is exciting to attend conferences convened by Indian people and to realize how much of the presentations and hallway conversation is dominated by themes of Indian history, culture, values, and beliefs. In contrast, there is very little of this flavor at gatherings populated by majority culture members. Those who take their heritage for granted rarely discuss it and assume that there is some implicit cultural message in their deliberations. This lack of asking "who are we?" and "what do we stand for?" often leads to sterile discussions and solutions. Fortunately, Indian people, by historical circumstance, have been forced to ask these difficult questions; I believe that ultimately this will lead to more enduring solutions.

There is one aspect of Indian culture that also facilitates the search for creative solutions. Interactions between Indian people are marked by a high level of tolerance for the ideas and views of others. Everyone is allowed an opportunity to present his or her ideas and have them considered by the group. This has often been labeled a lack of interference with the affairs of others and has been linked to Indian child-rearing practices where children are allowed a wide range of behaviors without sanction. There is always a danger in these types of generalizations, however, and care should be taken to interpret cultural patterns within specific contexts. It is possible, for instance, that the lack of interference in child-rearing could in certain instances be a cover for inadequate parenting. Likewise, lack of criticism of certain ideas presented at meetings could simply result in sloppy thinking and poor solutions to problems. Also, overbearing individuals can monopolize deliberations, leaving others reluctant to speak up.

Prevalence Data

The analysis of Indian alcohol problems has always been hampered by lack of accurate data regarding prevalence rates and patterns of use. This lack has led to many of the misconceptions addressed by May. In his paper, May does review the available data and puts the problem in the most complete perspective that is possible at this point. Of particular import is the distinction made between "alcohol-abusive" and "alcohol-specific" morbidity and mortality rates. This has important implications for both prevention and treatment efforts in Indian communities. In part it will help direct efforts away from the old approaches designed to attack chronic alcoholism and toward more salient efforts to reduce the effects of high-risk behavior.

Still lacking, however, is an accurate picture of the extent and nature of alcohol abuse on reservations. May cites several studies that show high variation in alcohol rates and alcohol-related problems from reservation to reservation. While these are the only data available, one has to wonder about the comparability from study to study, especially in terms of methodology. The same concern exists with respect to the unevenness of the Indian Health Service data that is used to compare rates and patterns from one area of the country to the next. While these data derive from the same data-collection system, there is some suspicion that the diligence and accuracy with which information is collected from area to area are quite variable.

My colleagues and I have been collecting data on the rates and patterns of alcohol abuse among Indian adolescents for the past 15 years, and over that period of time we have surveyed youth from dozens of reservations across the country (Beauvais & LaBoueff, 1985; Beauvais, Oetting & Edwards, 1985; Beauvais, Oetting, Wolf, & Edwards, 1989; Oetting & Beauvais, 1986). We have consistently found that Indian youth have significantly higher rates of alcohol involvement than non-Indian youth, and that there is only modest variability in alcohol involvement from reservation to reservation. Since the methodology has been the same over the years and across locations, it would seem that the differences found in the studies cited by May might bear reinterpretation. One possibility that should be examined is that patterns of alcohol use change from adolescence to adulthood. It might well be that alcohol use is nearly universal among adolescents but that varying environmental factors on different reservations lead to different rates of use. If this is the case, it would be important to discern what these constraining factors are so they could be more universally applied.

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COMMUNITY DEVELOPMENT AS CONTEXT FOR ALCOHOL POLICY

NORMAN DORPAT, M.S.

Dr. Philip May has presented a broad array of techniques and policy-based options for American Indian communities battling substance abuse. Figures one through three in his paper offer a comprehensive digest of relevant policy options. These figures and the substantial reference section provide policy-makers, community leaders, and researchers with a clear and concise resource. In particular, the clarification of Indian Health Service and other epidemiological and mortality data is a substantial contribution. Common fallacious perceptions pertaining to American Indian alcohol consumption are also addressed. For example, the contrasting of scientific research with the popular perception that American Indians are systemically more susceptible to alcohol is exceptionally clear and direct.

Many of the policy considerations presented by May are well grounded in social learning theory. As a model of clarity and specificity for development of alcohol policy, his paper is consistent with the social learning principle of "practice what you preach." May consistently calls for clear and rigorous policy development.

Bringing About Change in Formal Versus Informal Social Structure

The community as a social structure encompassing values, beliefs, and attitudes is addressed throughout May's paper. "Informal" social structures of family, religion, and economic ties are cited as primary social groups in which May says value shifts will result in "the most profound and permanent social changes in public health."

In May's paradigm, formal institutions such as the judiciary, educational, and health care systems only "assist" and "nudge the primary institutions." This appears to be somewhat incongruous in that "the meat" of May's paper consists of specific policy options that are primarily the purview of the formal social institutions of judiciary, government, public administration, and education.

Development of Sense of “Community” Must Precede Policy Development

If development of clear and consistent policy is to occur through action of primary social groups, it follows that development efforts enhance the level of cohesiveness of the community and the viability of primary social groups. If individuals and families within a community are struggling with the day-to-day economic and social realities of unemployment, inadequate health care, fragmented educational resources, and poor housing, the likelihood of primary value shifts will be reduced.

May outlines a “public health approach” as a basis for community-based social change. Guidelines for a sequential approach to development of public health policy are delineated:

1. Define a “primary message” or community goal.
2. Define “safe drinking” practices.
3. Define and promote specific safe behaviors and practices.
4. Build a broad base of community support.

How likely is it that a collective consensus on policy definition prior to the development of a broad base of community support can be achieved? Attempts to do this through legislated (P.L. 99-570s 4206) “Tribal Action Plans” have met with mixed success. Beginning in 1987, tribes were to develop broad-based policy through coordination of existing agencies. Unfortunately these plans sometimes were reduced to a “paper exercise,” largely because they were attempts to develop policy in communities where severe pre-existing economic and social needs were preeminent. How is a broad base of community support to be built if a community is struggling with basic needs of food, clothing, and shelter? Community resources available for economic and social development vary widely among the various Indian tribes and sometimes among various groups on some reservations. For example, on many reservations, K–12 education may be provided by a variety of public schools, tribally controlled grant schools, Bureau of Indian Affairs (BIA) contract schools, or BIA operated schools. Further fragmentation occurs among the various early childhood entities, e.g., Head Start, Even Start, ECEAP, child care, and preschool. Adult education venues may be equally diverse, or may be nonexistent in some locales. The level of community “cohesiveness” must be recognized as a significant factor. Development of the clear and consistent policy options will be enhanced if education of the community and development of a broad base of support precedes consideration of policy options.

The development of the PRIDE (Positive Reinforcement in Drug Education) program in the Puyallup Tribal Schools is an example of

successful implementation of many of the options listed in May's Figure 1. Among other awards, the Puyallup Tribal Schools were the only American Indian schools to receive recognition from President Bush as a Drug-Free School in 1989. The program was developed after the school underwent a complete reversal from a period of no sense of "community" of staff and students to one that was cohesive and purposeful. Drug and alcohol prevention programs had been tried previously. It was not until this development of a sense of "community" that the PRIDE program received the broad-based support that led to successful implementation of clear and consistent policy.

May has presented a document that goes far in meeting its stated purpose of expanding consideration of various policy options available to American Indian communities. The paper is presented in a clear and concise manner. The need to build on the strengths of primary social groups, e.g., family groupings, is well taken. The extent to which policy options can be defined and implemented, however, will be largely dependent on the antecedent conditions of community cohesiveness and socioeconomic development. Attempts to develop a broad base of community support for alcohol prevention policies that do not first recognize the deeper issues of community development may not achieve the full impact that is so needed in many American Indian communities.

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THE NEXT TWENTY YEARS OF PREVENTION IN INDIAN COUNTRY: VISIONARY, COMPLEX, AND PRACTICAL

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In the past few years, Dr. May has addressed alcohol issues in the context of the community, tribe, and larger levels of society. His current manuscript is an excellent summary of specific alcohol policy strategies which research and community experience suggest would lead to systems change, a reduction in alcohol abuse, and an increase in individual and family resiliency and health. These strategies and the concepts that underlie them are being discussed more and more in the prevention and intervention field, although approaches focusing exclusively on changing individuals remain the norm. Dr. May's article, if disseminated and discussed widely in Indian country, would go a long way to challenge that norm.

I read May's manuscript upon returning from a meeting of the Advisory Committee on Substance Abuse Prevention of the Office for Substance Abuse Prevention (OSAP). Much of what May suggests has strong parallels to that agency's newest initiative, the Community Partnership Demonstration Grant Program. This program is an outgrowth of research and social learning theories that suggest that long-range, comprehensive, community-based prevention programs are most effective at the local level. Models found to be effective in Indian communities are those that promote self-determination (i.e., they are not prescriptive and do not try to tell communities what to do), interdependence (they recognize that each individual and agency is affected by the actions or inactions of another), and social responsibility.

May's presentation is very refreshing because it proposes a broader view of prevention and intervention strategies than is generally held. The popular view focuses almost exclusively on changing individuals, who are considered to be the most manageable unit of society. This approach is the politically safest as well, for if the individual fails, only the individual is to blame. If society fails, we are all to blame.

The following are four principles outlined in the OSAP monograph, *Youth and Drugs: Society's Mixed Messages* (see "Additional Resources," this commentary). The reader will note that these principles and the concepts put forth by May are similar and reinforce each other.

1. Drug problems are complex and cannot be reduced solely to the level of individual or personal behavior.
2. An integrated approach to prevention emphasizes a shared responsibility for addressing problems.
3. An integrated approach to prevention also emphasizes long-term planning as well as short-term crisis intervention. While crises will always occur and must be planned for, communities need to do more than short-term problem solving.
4. It is necessary to disseminate information about the harmful effects of drugs, but this is rarely sufficient to bring about changes in behavior.
5. Comprehensiveness is an important part of an integrated approach.

Both May and the OSAP have developed a new vision of prevention that recognizes that it is more difficult and more complex than traditional approaches. Above all, they emphasize that prevention efforts must be practical. As May has written, "If the prevention measures described here can be *applied systematically and reasonably* within the social and cultural contexts of a Native community, then the ultimate result should be positive" (emphasis added). The OSAP *Youth and Drugs* puts it this way: "Prevention needs to be visionary and idealistic, but it must also be practical."

In particular, May is to be commended for recognizing that policy-makers can become enmeshed in an overwhelming set of interlocking and complex social, economic, political, and legal problems, with strongly held and conflicting feelings and opinions on all sides.

Process for Comprehensive Planning

May has proposed four action steps communities can follow to develop a comprehensive alcohol abuse-prevention plan:

1. Form a consensus of the problem.
2. Define "safe drinking" practices.
3. Define and promote specific safe provisions.
4. Build community support for a comprehensive prevention plan.

Videos and print materials can be used to acquaint community leaders with the scope of the problem and the latest thinking in the field. In addition, the college operated by the tribe can be an important place to develop a communitywide consensus about a substance abuse-prevention program. The college is useful because the student body generally

represents a cross-section of the community, and information-giving courses and symposiums may be organized through the college.

Additional Resources

A number of publications useful to community organizers are available through the National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD, 20852, (301) 468-2600 or 1-800-SAY-NO-TO (DRUGS).

OSAP Prevention Monograph 6 — Youth and Drugs: Society's Mixed Messages has been previously mentioned in this review. The essays in this monograph focus attention on a variety of ways in which the social, cultural, and policy aspects of the environment contribute to drug use and can be marshalled to reduce the demand for drugs. Environmental approaches are a relatively new and unexplored dimension among prevention approaches.

Prevention Plus II: Tools for Creating and Sustaining a Drug-Free Community provides a framework for organizing or expanding community substance abuse prevention activities for youths into a coordinated system. This publication is written for persons from all facets of the community who are serious about prevention and in a position to help organize a community effort.

Research, Action and the Community: Experiences in the Prevention of Alcohol and Other Drug Problems includes 29 papers authored by people from eleven countries. The papers describe the experiences of community action projects in carrying out research in a variety of settings (e.g., school, the work place, drinking premises, and other community settings). These experiences contain important lessons for future initiatives.

Guide to Mobilizing Ethnic Minority Communities for Drug Abuse Prevention describes ways that ethnic minority communities can take action against the drug problem.

Handbook for Evaluating Drug and Alcohol Prevention Programs: Staff/Team Evaluation of Prevention Programs (STEPP) provides a comprehensive, but easy-to-use evaluation tool for program managers. It emphasizes that staff members must work together as a team and provides instruments and activities for determining program effectiveness and documenting and monitoring services.

Working with Evaluators: A Guide for Drug Abuse Prevention Program Managers offers guidelines to help prevention staff work cooperatively with evaluators and researchers in designing and implementing program evaluation. Instructions for developing an evaluation plan, issues in evaluating prevention programs, and the ways evaluation data are used are included.

Future Directions

This is a very exciting time for those who would develop and implement effective programs in Native communities. The signs point to significant, positive changes in how American Indians and Alaska Natives understand and react to alcohol. Some tribes are demonstrating strong, concerted community action; many communities are willing to share their experiences and be honest about their "failures." In addition, problems related to alcohol abuse currently have high visibility — although one never knows when the pendulum will swing to other issues.

The opportunity to speak, be heard, and make a difference has never been greater. Indian communities have the opportunity to lead the way in developing effective prevention programs for other sectors of American society.

Those who promote positive change most effectively are not those who provide a new set of answers, but those who allow a new set of questions.

— William Lofquist

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MUCH REMAINS TO BE DONE

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Dr. Philip May presents a highly competent discussion of the major considerations attending morbidity and mortality associated with alcoholism on Indian reservations in the United States. Unfortunately, his article in this publication is mostly applicable to the period prior to 1985. Since 1985, the profile of chemical dependency in Indian country has been dramatically altered. A proliferation of substances ranging from black tar heroin to designer drugs, often used intravenously, have taken hold on reservations across the United States. In addition, consequences of chemical dependency have altered. Instead of risking a bad hangover and the occasional multifatality automobile accident, today's drug abuser faces the risk of AIDS. The sexual promiscuity associated with alcohol abuse intersects with the long-standing risks associated with needle sharing to place both drinkers and druggers in a risk pool the dimension of which is significantly expanded since the early 1980s.

The year 1986 was a watershed in terms of chemical dependency in Indian country for a variety of reasons. The film, "For the Honor of All," which detailed the triumph of sobriety at Alkali Lake, was released. The Anti-Drug Act of 1988, Public Law 99-570, was enacted, providing for the first time resources and direction to the Indian Health Service (IHS) and Bureau of Indian Affairs to coordinate their efforts and make a priority of the problem of alcohol and drug abuse among Indian tribes and their members.

The year 1986 was also a turning point in the epidemiology of chemical dependency on many reservations. Historically, Indian populations have suffered from a diabetes pandemic. Needles and injections were a painful daily ordeal for many. Intravenous drugs, especially Asian heroin, were too costly for most Indians to consider. In 1986, the prevalence of black tar heroin became impossible to ignore. This addiction soon became as cheap as alcohol and almost as available. An epidemic of injectable methamphetamines, manufactured in rural laboratories across the South and West, occurred at approximately the same time. These low-cost, highly addictive drugs changed the face of chemical dependency in Indian country in a very fundamental way. Forty ounces

and a joint was once the basis for a party. Now parties come in needles, and chemical injections to avoid withdrawals occur around the clock.

In 1986, sexual promiscuity and substance abuse were identified as risk factors for infection with the human immunodeficiency virus, which causes Acquired Immune Deficiency Disease (AIDS). Although the Centers for Disease Control did not add American Indians to the demographics of its surveillance forms until August of the following year, those familiar with the epidemiology of substance abuse in urban and reservation communities became aware that the price tag on Indian alcoholism was about to escalate dramatically. The combination of sexual promiscuity traditionally associated with alcohol abuse, plus steadily increasing intravenous drug abuse in the Indian population, was a potent disease problem. This was true especially on remote reservations that lacked laboratory support to help prevent the spread of sexually transmitted and blood-borne diseases.

Other Indicators of Alcohol Problems

Mortality data is an excellent indicator of alcohol problems, for it is not duplicative. Its biggest problem, at least in the Northwest, is that people who are born Indian often die "Other," and thus the figures lack integrity. Collected mortality data lacks death from alcoholic gastritis, pneumonia (prior to AIDS, most Indian pneumonia deaths were alcohol-related), esophageal varices, and so on.

Morbidity is another good indicator, although it is rarely seen in a patient chart. After passage of P.L. 99-570, IHS service unit directors and tribes were instructed to review their alcohol morbidity data. At one northwest reservation whose trans-generational alcohol problems are at least as entrenched as one might expect, review of patient charts revealed only six instances in which alcohol was recorded as a factor associated with morbidity.

Impact on the Family

May's article contains a detailed analysis of the impact of alcoholism on the individual and the community. It would have been useful if he had focused on an interim unit, the family, in presenting the disease process and systemic impact of alcoholism. Analysis of alcohol abuse in the family process is vital to understanding such problems as sexual abuse and domestic violence.

Alternatives to Chemical Dependency

May acknowledges some value in primary prevention, intervention (which he terms “secondary prevention”), and residential treatment (“tertiary prevention”), but focuses on a process of community consensus and community-based regulation as vehicles for achieving long-term reduction of alcoholism. While the idea of enacting and enforcing rules and regulations developed by consensus within the community has some merit, this focus overlooks a major cultural reality that supports chronic alcohol abuse in rural communities, Indian and non-Indian alike.

Since the 1930s, rural activities directed at obtaining food for subsistence have decreased. Food comes in cans. Food is purchased at stores, with wages or welfare. Only the very traditional people will dry salmon, some jerky, dig roots, and dry berries. Even poor people have refrigerators and can openers; many have freezers. In addition to a diminution in the amount of work required to place food on the table, communities have incurred a major breakdown in associated group activities. Village cultures that once consisted of clusters of housing now function on individual plots and allotments. Group work and group recreation are victims of this trend, and group drinking has managed to fill a great deal of the resulting void.

By and large, the chance to earn a living wage with which to purchase food at the store has been minimal. On many reservations, except for seasonal work in agriculture or fishing, 80% of the men may be chronically unemployed. In a capitalist country, where one's dignity and status are measured by the type of work and size of salary, such conditions are the equivalent of emasculation. In the absence of constructive alternatives, the enforced leisure, in the company of friends and a bottle, is difficult to redirect.

Similarly, rural communities offer few recreational alternatives. Most are fortunate to have a single indoor basketball court. Often the basketball court is in the center of a building that also houses offices, courts, and social services; this means it cannot be used for loud children's play during the day. In the evening, young adults pre-empt the space; then we wonder how and why children turn to other forms of entertainment, including drinking. Resources to support consistent, supervised youth athletics and activities, including those for youngsters and young adults, simply do not exist.

Prevalence Studies

May has written that to help set the stage for public debate on alcohol policy, it is helpful to have a discussion or study of the prevalence of drinking in the community. There is some utility in prevalence studies,

particularly where they focus on individuals and communities. Generalizations about Indian drinking abound, and generally exaggerate the size of the problem. Moreover, prevalence of alcoholic behavior often varies markedly, even from one district to the next on the same reservation.

Prevalence studies can be misleading, however, and should be accompanied by an impact analysis. Frequently only one or two families are engaged in behavior that gives the appearance of a communitywide problem. Individuals with severe drinking problems often consume two to three times the amount of alcohol as others who drink. Understanding the prevalence, severity, nature, and impact of a community alcohol problem is an important aspect of assessment and problem-solving.

Alcohol and Human Behavior

May takes the position that communications can effectively set and enforce limits on human behavior, including that which is associated with intoxication. Indeed, treaties and tribal codes frequently specify prohibitions against alcohol, intoxicated behavior, use of alcohol by minors, and related conduct on reservations.

There are ways that Indian communities can control the public aspects of alcohol-related behavior. For example, the Warm Springs Reservation in Oregon has recently set up comprehensive road blocks and sobriety checks. The tribal court regularly incarcerates pregnant women who abuse alcohol or other drugs. These practices discourage drunk driving, and tend to cause chemically dependent pregnant women to seek treatment or leave the reservation.

Primary Prevention

May has written that "health education that focuses only on the negative health consequences could probably be de-emphasized on many reservations." Yet he has also pointed out that knowledge, in and of itself, does not change chemical dependency behavior. However, this does not mean that we should abandon or relax emphasis on primary prevention. As with antismoking campaigns, a considerable investment in public awareness over time is necessary before significant numbers of people correlate their knowledge with the consequences of risk behaviors.

Knowledge impacts behavior when individual awareness of the actuality and severity of consequences dawns. With the antismoking effort, which began in earnest in 1963 with the first Surgeon General's Report on Smoking and Health, major changes in smoking behavior became evident a decade later. In Indian country the two watershed events,

equivalent to the Surgeon General's Report, were Alkali Lake and Public Law 99-570 in 1986.

In terms of the impact of primary prevention efforts to reduce alcohol abuse in Indian country, we are in the antismoking equivalent of 1963. We cannot expect too much too soon. With Indian alcoholics, we are dealing with a population that has yet to respond to either antismoking or alcohol prevention messages. However, in other segments of the Indian population, antismoking messages are making headway, as are sobriety messages. The results are apparent in public behavior. Indian conferences once took place in smoke-filled rooms and adjourned to the nearest bar; pow wows were drunken brawls. No longer. Smoking and drinking are strongly discouraged in tribal activities and functions. Alcohol is not permitted at pow wows, and intoxicated individuals are promptly ejected. Progress, as measured by fundamental shifts in public behavior, is being made at a steady pace.

Public Health Approach

In this publication, May finds that the public health approach to Indian alcoholism is correct. The limitation of this approach, which works well for diseases like measles, is that alcoholism and the unacknowledged, but related problems of intravenous drug abuse and AIDS are not neatly packaged. They are, at their core, social problems with medical consequences. Public health approaches, including education and community response, are helpful. However, just as treatment of cholera requires facilities for treatment of sewage, prevention of chemical dependency depends on providing opportunities for personal growth, including employment, education, and recreation.

Ultimately, people for whom addiction is a reality will not have the motivation to undertake a daily battle unless they know and fully fear the consequences of failing to terminate life-threatening habits.

Summary

Beginning in 1986, due to fundamental shifts in the problem of alcohol and drug abuse, the perception of the problem of alcoholism and the risks associated with chemical dependency brought profound changes in social behavior and values in many Indian communities. To a limited extent, those changes are supported by public resources. Under P.L. 99-570, for example, tribes drafted Tribal Action Plans. Many addressed issues of economic development on the reservation. Many planned recreational facilities and programs to provide alternative activities for their members. Some tribes undertook expansion of alcohol/drug

programs, including in at least one case establishing their own primary residential treatment facility.

May is to be commended for assembling a genuinely thoughtful and useful analysis of the epidemiology, mortality, and morbidity of Indian alcoholism. His contribution will be helpful to many who continue complex problem-solving in this field. His proposed solutions are not without merit; they simply do not deal sufficiently with the realities of the problem.

Public health efforts, including prevention and treatment, are making progress and should be continued and increased. Public awareness of the consequences of alcoholism and drug abuse, virtually numbed by two centuries of blood and tears, is increasing because there is finally some hope of progress. More importantly, it is becoming apparent to tribal leaders and Indian health professionals that the price of failure is about to become incalculable. The advent of intravenous drug use by Indians, in the context of the AIDS epidemic, has changed the entire calculus of risk behavior. The question is whether efforts at prevention and rehabilitation will take hold sufficiently and in time to avoid great tragedy.

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COMMENTARY

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I am in entire agreement with Dr. May's paper, both in respect to the problems faced in arriving at an understanding of drinking in Indian communities and to the recommendations he makes for devising effective community-based prevention programs. In consequence, I will limit my comments to one area of concern to me: namely, that how the data on Indian drinking are presented shapes how the problem is perceived and, subsequently, has a negative influence on the chances of success for community-based prevention and treatment programs.

An increasing number of Indian communities are coming to the conclusion that only the community can eliminate alcohol abuse (Rhoades, Mason, Eddy, Smith, & Burns, 1988). This is in accord with Weibel-Orlando's (1989) assertion that the best Indian programs begin at the community level, are initiated by charismatic role models, maintain ongoing relationships with the "patients," and view themselves as an alternative to the drinking subculture. Since 1985, the Indian Health Service also has encouraged the development of prevention programs in Indian communities and schools.

For such programs to be successful, communities must maintain their energy and enthusiasm; in my opinion, this is only possible if the community has a positive self-image. Yet, as May has shown, the belief that Indians cannot hold their liquor is remarkably persistent among Indians themselves. Not only does this "firewater myth" predispose Indians to conceive of their problem in either/or terms, it also reinforces other beliefs that hold the Indian to be qualitatively different and in many respects inferior to Anglo Americans.

My concern here is the way in which even advocates of Indian causes perpetuate a negative view of Indians by: (1) presenting aggregated data that compare all Indians with national averages; (2) assuming a causal relationship between alcohol use and automobile accidents as well as several social pathologies such as suicide and homicide; and (3) allowing the lower morbidity and mortality rates of women drinkers to keep attention focused on male problems with alcohol. I will contend that as long as these practices continue, the self-esteem of Indian communities will be undermined and subsequent attempts to initiate community-based

programs will needlessly incorporate self-defeating attitudes. Finally, I will try to suggest some ways to mitigate these problems without going to the opposite extreme of arguing that Indian communities do not face serious problems and are not, in consequence, in need of increased budgets and special efforts.

Statistics Regarding Indians and Alcohol Use

From 1969 to 1971, the annual suicide rate in the Portland Indian Health Area was 28 per 100,000 population, somewhat higher than that of 23 for the national Indian rate (Shore, 1975). The regional rate, however, was considerably distorted because more than half of the suicides were committed by one tribe, the Shoshone-Bannocks, which had a rate of 122. When the suicides from this one tribe were omitted, the Portland Area rate was reduced to 14 per 100,000 population. One coastal tribe with a rate of 8 per 100,000 was considerably below the national average.

Similarly, although Hopi suicide rates were considerably higher than the national average after 1965, they were no higher than those of rural counties in the state that had few Indian residents (Levy & Kunitz, 1987). Hopi rates, for example, were 13.5 per 100,000 in 1966 and 23.7 in 1981. For the same years, Yavapai county had rates of 14.2 and 22.8.

Fatal traffic accidents are also said to be higher among Indians. In 1971, the age-adjusted Indian mortality rate was 96.5 per 100,000 population, more than three times the national average. In 1974, the mortality rate on the Navajo reservation was 91 per 100,000 (Katz & May, 1979). Katz and May note that while the state of Arizona has a traffic accident fatality rate higher than that of the nation, the Navajo rate is higher yet. In 1980, the motor vehicle fatality rate was 20.8 for the nation (Hacker, 1983, p. 71). The rate for Arizona was 35.43. This comparison, however, also tends to obscure the picture because, while Indians live in rural areas, Arizona has a large urban population; although urban traffic accidents are many, fatalities occur at a much lower rate than in rural areas.

When the rural populations in Arizona are compared, the traffic fatality differences between Indians and non-Indians are lessened considerably (Table 1). The counties with the largest proportions of Indians in the rural population (Apache 82%, Navajo 61%, Coconino 46%) have had an average annual fatality rate of 118.3 for the years 1979 through 1981. Thirty-two percent of the deaths (37.9/100,000) involved alcohol. By contrast, the seven counties with the lowest proportions of Indians (0%–8%) had an average annual fatality rate of 136, of which 42% (57.35/100,000) involved alcohol. Speeding, distance from medical facili-

Table 1
Rural Vehicle Average Annual Fatality Rates and Percent Involving
Alcohol in Arizona Counties Ranked by Proportion of the Rural
Population That Is Indian, 1979–1981

County	% Indian	Rural Rate	% Alcohol
Apache	82	107.3	32
Navajo	61	87.0	28
Coconino	46	138.7	36
Graham	17	42.0	32
Pinal	16	118.4	44
Oila	11	119.2	37
Pima	11	110.8	40
Maricopa	8	170.3	45
Mohave	6	160.6	37
Yuma	6	96.2	44
Yavapai	2	69.2	28
Greenlee	1	61.3	19
Cochise	1	71.5	42
Santa Cruz	0	53.8	73

% Rural Pop. Indian	Rural Fatality Rate	Rate Alcohol Involved
46–82	118.29	37.9
11–17	100.04	40.0
0–8	136.05	57.35

Source: Lohn (1991).

ties, and alcohol use combine to make traffic accidents a serious problem for rural populations regardless of race or ethnicity (Lohn, 1991).

The consequences of alcohol abuse most often include a group of social pathologies labelled as “alcohol-related” or, as in May’s paper, “alcohol abusive.” There seems to be little reason to doubt that intoxication leads to accidents rather than the other way around, but whether acts of violence are always and everywhere more frequent when associated with alcohol use is less clear.

Among the Navajo, for example, the proportion of suicides as well as homicides preceding a suicide involving alcohol increased after 1950 (Levy, Kunitz, & Everett, 1969). Yet suicide and homicide rates had not increased since the 1940s and the violence of the homicides had actually decreased. By contrast, alcohol-related homicides committed by Blacks and Anglos in Philadelphia were significantly more violent than those committed by either drinking Navajos or sober Philadelphians. Although

suicide and homicide rates were constant across the reservation, the incidence of alcoholic cirrhosis was higher in areas near the reservation boundary and, hence, nearer to sources of supply. Similarly, alcohol deaths were distributed evenly across the Shoshone-Bannock population, while suicides and murder victims were concentrated in five extended families and had been for some time (Levy, 1988).

Invariably the statistics show that women die from alcoholism and alcohol-related disorders less frequently than men. Yet Navajo women were at higher risk to become alcoholics than men. Though fewer Navajo women than men drink, a higher proportion of women become serious problem drinkers and a higher proportion of women who contract cirrhosis die from it than do men (Levy & Kunitz, 1981). Although the prevalence of fetal alcohol syndrome is not as high among Navajos as it is among some other Indian groups, it seems to be rising (May, Hymbaugh, Aase, & Smet, 1983). It appears that wives continue to feed their drinking husbands, but that when a woman drinks, the family tends to disintegrate and her journey into alcoholism is assured.

During the past decade more Navajo women have taken to drink, many from a desire to avoid being separated from their men. The social cost in broken families and the enormous costs involved in caring for children with fetal alcohol syndrome indicate that, despite women's lower mortality rates, alcohol programs must direct more attention to women's problems than heretofore.

By consistently presenting the higher prevalence of social pathology among American Indians, we foster the image of the Indian as sick and Indian communities as disintegrated. There is, however, considerable evidence that, despite the similarities between Indians and the rural populations surrounding them, the pattern and dynamics of Indian suicide, homicide, and drinking are often quite different. Navajo suicide, for example, is committed most often by married males between age 25 and 39 because of marital conflicts and sexual jealousy (Levy, 1965), while those at risk for alcoholism, suicide, and homicide among the Hopi are the children of parents who made disapproved marriages (Levy, Kunitz, & Henderson, 1987). Much Indian drinking involves periodic binges, often in public, rather than the steady, solitary drinking of the middle-class American alcoholic. Most male Navajo drinkers scored in a range that would indicate alcoholism, yet after age 45 or so, most are able to stop drinking entirely (Levy & Kunitz, 1974).

Despite the demonstrated cultural variability among different Indian groups, there has been little rethinking of the types of treatment programs appropriate to Indian needs. Suicide prevention programs are still predicated on the assumption that, as with Anglo-Americans, Indian suicide is always an *anomic* act of withdrawal. Alcohol programs are still mod-

elled after Alcoholics Anonymous programs, which hold that alcoholism is a disease for which the only effective treatment is total abstinence.

Programs that assume that Indian social pathology is only different in degree are almost invariably designed to target and treat individuals deemed to be most at risk. There are, in consequence, alcohol treatment, suicide prevention, and juvenile delinquency programs, all of which identify and thus label the individual before treatment can begin. Even prevention programs are predicated on the notion that the greatest effort must be to make contact with individuals thought to be the most at risk.

If the only way to fund programs is to demonstrate that Indians are sicker than Anglo Americans, the failure of community-based prevention programs is almost guaranteed. The idea that drinking is a learned behavior that can be changed in future generations by presenting new models of behavior can only be done by communities with the psychic energy, self-esteem, and confidence to innovate and experiment.

How, then, shall we steer a path between the Scylla of Indians being much like their neighbors and the Charibdis of their unique cultural differences? To argue, as I have, that many Indian groups are neither more nor less alcoholic, suicidal, or prone to violence than many non-Indian populations may be taken to mean that they are not in need of adequate funding and new programs. On the other hand, to emphasize their problems and cultural differences serves only to reinforce the notion that they are sicker and somehow less able to adapt to the modern world than their neighbors, a view that fosters a sense of inferiority and helplessness. By emphasizing cross-cultural similarities, we are led to develop programs based on Anglo-American definitions that utilize inappropriate treatment modes. By considering only the cultural differences we neglect those causes of social pathology that exist regionally.

The Need for Culturally Relevant Research and Prevention Programs

The solution to this dilemma, if one exists, involves two courses of action. One, already mentioned by May, requires that each Indian community conduct research into its own patterns of drinking: what is needed is research that investigates the culturally specific determinants of drinking behavior and makes regional comparisons. It is only from the findings of such research that problems may be accurately defined and understood and convincing programs designed. It would, of course, be possible that the aim of the program would be no more than to reduce the level of drinking in the community. In that case, evaluation research would not have to measure suicide, homicide, or cases of domestic violence. Other than a reduced proportion of motor vehicle accidents due to drinking,

however, other measures of success are difficult to define. Is total abstinence the goal or merely a reduction of drinking frequency, and how closely can individuals be followed to determine drinking levels? As demonstrations of the magnitude of drinking problems most often include the "alcohol-related" conditions that can be measured by reviewing death certificates and police records, it may not be wise to ignore such records entirely. If they are included, however, the research must be detailed, and realistic expectations must be established as to the expected reduction of incidence rate.

The second requirement is that prevention programs avoid identifying and labelling individuals at risk in order to avoid attaching the "sick" label to them and segregating them from their "healthy" peers. Noting that the individuals most at risk for alcoholism and suicide among the Hopi had already been labelled as deviant by the community because of their parents' transgressions, we felt that a wilderness adventure program would best avoid negative labelling, involve young people whether or not they were deemed at risk, and be economically feasible.

Such programs have enjoyed some popularity, both as programs designed specifically for delinquent youth (Vision Quest) and for general enrichment and confidence-building among freshman college students (Outward Bound). Such programs may incorporate prevention components such as education and counseling without seeming to do more than address the needs of adolescents generally. The effect of such an arrangement would be to create a "treated" group comprising all individuals in the program and an "untreated" group of those who had not joined the program. Both would include individuals thought to be at risk as well as those not at risk. Data could be collected on the entire age cohort year by year. Baseline data for a variety of social problems could be used to measure success as well as identify newly emergent patterns. In addition, stigmatization of individuals at risk would be minimized and troubled youngsters would benefit from interaction with well-adjusted youths with leadership skills.

AN EMPHASIS ON SOLUTIONS RATHER THAN PROBLEMS

CAROL CHIAGO LUJAN, PH.D.

Numerous articles have been written about alcohol and American Indians. These articles have focused primarily on the etiology of drinking, the magnitude of the problem, the drinking patterns of American Indians, and the effects of alcohol consumption on American Indians' health and lifestyle. Few studies have actually addressed possible solutions to the problem. Dr. Phillip May's paper on alcohol policy for American Indians and bordertowns is one that begins to summarize the literature on alcohol policy as it relates to American Indians and Alaska Natives. His work should generate creative solutions within the American Indian and Alaska Native communities as well as encourage additional research in this area.

Alcohol policy for a number of American Indian tribes and Alaska Natives is one of ongoing concern. May provides an excellent summary of the policy literature and presents sound guidance for American Indian communities and bordertowns to follow. The presentation of figures listing specific recommendations for intervention, the tables providing mortality statistics, and the additional references within the bibliography all combine to provide a comprehensive compendium for interested policy-makers.

Major Themes and Points of Discussion

It is important to highlight four significant themes that surface in this paper: (1) there are no simple or easy solutions to the problem of alcohol abuse in any community; (2) communities must develop a comprehensive, consistent, and clearly defined alcohol prevention/intervention policy; (3) the policy must involve a public health approach focusing on the community and integrating all major institutions (such as the family, school, religion, law enforcement, courts, health services, community services, media, etc.); and (4) value and attitude changes must be promoted because social change in public health occurs after value and behavior shifts in primary social groups.

Furthermore, May accentuates two additional points that are significant factors in the prevention of alcohol abuse. The first point is often

neglected in prevention, intervention, and treatment modalities: the lack of emphasis on strengths within the community. The second point, regulating the sale and control of alcohol, is considered controversial in many Indian tribes and consequently often is not adequately discussed. Usually the issue of legalization is forced on the agenda as a result of a recent alcohol-related tragedy. Under these circumstances it is difficult to discuss the issue clearly and rationally without polarizing the community.

Strengths in the Community

There are more than 300 federally recognized tribes in the United States that differ in various ways, including language and culture as well as their experience with alcohol. Some tribes have serious substance abuse problems while others do not.

Many tribes have sophisticated and highly specialized tribal governments and constituencies. Within these tribes, there are hardworking, caring, and dedicated people. Examples of this are pervasive throughout Indian country. There are numerous committed, articulate, and well-educated tribal leaders who encourage developing innovative programs within the communities that are tailored to meet the specific needs of the community. For instance, under the leadership of Wilma Mankiller, the Cherokee tribe in Oklahoma has developed summer internships for high school youth. Each summer, students are assigned to work with an individual within the tribal government. This program provides several benefits for the high school participants, including increasing their knowledge and awareness of tribal government, providing a mentoring process for future tribal leaders, and giving students a means to earn money.

In addition, intervention and treatment programs are beginning to focus on aftercare and the family. The Phoenix Family Healing Center is one of the innovative programs that includes treatment for women and their children. This unique inpatient program offers culturally relevant continuity of care for both mothers and children. The center is currently in the process of including fathers within this holistic concept.

Furthermore, tribes are working cooperatively in their efforts to provide services to their membership. They are combining federal dollars with their own resources to provide intertribal services. For example, tribes in Oklahoma have combined their efforts and resources to build a child care center and recreation center. In the Northwest, a consortium of tribes have recently opened an emergency shelter for youth.

Young people across the country are also active in alcohol-prevention initiatives. Several teen support groups have been formed in various reservations across the country, including Tohono O'odham. Both the

public schools and the Bureau of Indian Affairs schools in this area have active student groups.

Additionally, intertribal councils in various parts of the country provide a unified voice for tribes within their region. The All Indian Pueblo Council in New Mexico has been in existence prior to the arrival of Western Europeans. It continues to be a viable mechanism for unity and political support for the 19 pueblos.

The above examples are only a few of the numerous and exciting activities that tribes are promoting as a means to strengthen and support the culture, the youth, the family, and the tribe. Unfortunately, these endeavors are seldom highlighted by the media. Rather, a major portion of media attention concerning American Indians has focused on the negative (Lujan, 1983).

Because of the negative stereotyping of American Indians that has been perpetuated throughout the centuries in literature and the media, many non-Indians have a distorted and negative view of Indian tribes. Furthermore, and most detrimental, a number of Indian people accept the negative stereotypes. This is particularly evident in the research by May and Smith (1988). The majority of Navajo respondents in this sample believed that Indians have a physiological or biological weakness to alcohol that non-Indians do not have. As May indicates, this is an inaccurate assumption; research indicates there are no differences between the Indians and non-Indians in their biophysiological susceptibility to alcohol. Stereotypes such as these become self-fulfilling prophecies and are used as an excuse for inappropriate behavior.

Regulation of Sale and Control of Alcohol

As May indicates, since 1953 tribes have had the authority to regulate alcohol traffic on their own reservation. However, as of 1974, only 92 reservations (31.4%) had passed laws to legalize alcohol on the reservation. Therefore, on the majority of the reservations, alcohol is still illegal. Earlier research by May (1976) indicates that tribes that have legalized alcohol tend to have lower rates of mortality and arrest than tribes that prohibit alcohol. Practical information such as this should be made available to the tribes so they can make knowledgeable decisions regarding legalization.

To adequately address the problem, tribes need to gain greater control over the sale and regulation of alcohol on or near the reservation. Those tribes that have alcohol establishments located on checkerboard areas (plots of land within the reservation boundaries that are owned and/or leased by non-Indians) should control and regulate the sale of alcohol within these areas; an example is the Cheyenne River Sioux.

Another important but neglected area in pursuing solutions to alcohol abuse is for tribes to work with the alcohol beverage companies. Dangerous and offensive advertising should be discouraged by tribes. For example, at a recent annual tribal fair, the local distributor of Budweiser beer threw candies packaged as Budweiser beer cans to children from their parade floats (Haiken, 1991). Tribes must take the initiative to contact these companies and attempt to change their advertising, labeling, and sponsorship. Several alcohol beverage companies are becoming sensitive to public concern about alcohol abuse and have developed various prevention programs.

Conclusion

May's paper is an outstanding summary of the alcohol policy literature and stimulates a number of ideas. The only suggestion I would make is to include teenage drinking as one of the behaviors that a community should not tolerate. This is a minor oversight considering the magnitude of the paper. This paper should be widely distributed to tribes for their use, review, and consideration.

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DO WE CARE ENOUGH TO ATTEMPT CHANGE IN AMERICAN INDIAN ALCOHOL POLICY?

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The problems created by and consequences of the style of alcohol consumption reported by observers of the North American Native peoples are well documented (Mail & McDonald, 1980; Mail, 1990). In this volume, Dr. Philip May provides a broad and clear summary of these problems, and proposes some specific steps that might be taken to address the seemingly insoluble conditions of Indian drinking. The caution that it is unwise to assume widespread alcohol abuse is well taken. While some tribal groups have been extensively studied and reported (e.g., Navajo, Sioux, and Apachean peoples of the American Southwest), there is virtually no information or epidemiology from many other tribal communities (Mail, 1984). Although the capacity to conduct reservation-specific epidemiology is available, this has not been accomplished. The alcohol use patterns of tribes are assumed or inferred from those for which data exists. There are almost no follow-up studies that might demonstrate any changes over time. Whittaker's research among the Standing Rock Sioux, and Westermeyer and Peake's work in Minneapolis are the major exceptions (Westermeyer & Peake, 1983; Whittaker, 1962; 1963; 1982).

May observes that there are drinking patterns and behaviors that do not pose a significant problem for Indian people, and thus their behavior may not be a target for preventive intervention. The literature about Indians and alcohol may be largely characterized as negative, adding to the Indian sense of deficiency and lack of control over their lives. Yet any health professional who works in Indian country knows that there are Indian social drinkers, for whom alcohol is not a problem. These individuals are never discussed and never studied, although they may serve as important role models for Indian young people, and their ability to manage alcohol may provide important clues to learning other styles than the style characterized as "Indian drinking."

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Research never seems to acknowledge another widely held empirical reality. For many individuals, drinking is pleasurable, and socializing with alcohol is fun. Knowing what limits to set differentiates the boundaries between control and intemperance. For some communities, there needs to be an expanded range of options from (a) it is acceptable to be abstinent, all the way to (b) it is acceptable to be a moderate user of alcohol. What should not be acceptable is acute or chronic intoxication; use of alcohol while pregnant; use of alcohol and other drugs in the workplace; and sale of, provision to, and use of alcohol by minors.

In developing a more accurate view of Indians and alcohol use, it seems that it would be useful to study the behavior and attitudes of the nondrinkers. In every community, in addition to those who visibly abuse alcohol, there are a significant number of individuals who abstain, whether for reasons of health, personal preference, and/or religion. In the hundreds of studies seeking to explain the causes of Indian drinking, there is a paucity of reports on abstinence. It seems curious that no one has ever sought to determine what protects or supports the individual who makes a nondrinking decision, because in the ability to choose not to drink may lie clues for the rest of the community.

Community Approaches

There are some excellent models for conducting community epidemiology. These have their roots in Lalonde's (1974) original working paper on the health of Canadians. It was Lalonde who first proposed the Health Field Concept, which attempted to define the multiple cause/multiple effect nature of health and disease (Dever, 1984). This conceptualization depicted health in four primary divisions: human biology, environment, life-style, and health care organization. The concept of life style (more accurately, self-created risks) was divided into three elements: leisure activities, consumption patterns, and employment participation and occupational risks (Dever, 1984). This is the aspect of the Health Field Concept that has received the greatest amount of attention, and not a little misperception.

Lalonde's concept, and the implementation in Canada, spurred the United States to also begin developing plans for health promotion and disease prevention. These were first promulgated in *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention* (DHHS, 1979). This was immediately followed by the publication of the *1990 Objectives for the Nation* (DHHS, 1983) and more recently, *Healthy People 2000* (DHHS, 1991). Dever (1984, 1991) provides clear guidelines for community-based self-assessments that help people compile relevant data and prioritize risks and solutions according to their own perceptions.

An even more holistic model is the one developed by Tony Whitehead. His "Cultural Systems Approach to Planned Change" incorporates a community-based analysis of cultural elements inherent within that specific culture, accompanied by the application of a planning model and an evaluation protocol for assessing impact of the planned change (Whitehead, 1990). Individuals familiar with the framework of the model can involve community leaders and lay people alike in conducting their own needs assessments and defining solutions.

In this volume, May observes that simplistic solutions are all too often advocated by those who are politically absolute, moralistic, and extreme. Most often, the emphasis is placed on treatment, with prevention receiving lip service, with no adequate resources or evaluation. Policy continues to be made, for the most part, by the federal government for implementation at the local level. Even tribal self-determination, as expanded by the passage of the Indian Self-Determination and Educational Assistance Act of 1975 (P.L. 93-638 and reauthorizations), is conducted cautiously because there always exists the possibility that funds might be reduced or redirected if decisions and actions are not in keeping with the general guidelines from Washington. All too often, self-determination translates into business-as-usual or "doing it the way it has always been done," instead of really innovating or adopting true local decision-making and policy guidance.

The key questions continue to be: (a) Where is the leadership for prevention? (b) How should prohibition be addressed? and (c) What should be the nature of prevention and treatment programs: community-wide or targeted interventions for high-risk families? To date, there has not been one well-designed nor carefully evaluated preventive intervention. May, in this volume, observes that a good research design at the beginning of a prevention project would pay important benefits for the community and the federal government. Many health professionals would agree with this sentiment, but few actively advocate for such rigorously planned interventions.

Prohibition, in those communities that continue struggling to maintain and enforce it, is an artifact of law. It is not a reality within Indian communities. What are the implications for veracity and law enforcement when there are codes and ordinances on the books that are as flagrantly flaunted as prohibition? Does this contribute in some manner to disrespect or disregard for other laws? A few individuals who supply liquor to "dry" communities drain away community resources without much return to the community. Although May's early research into prohibition and legalization suggests that such changes in law did not really make matters worse (May, 1975), tribes selling liquor, such as the White

Mountain Apache, do not appear to have been extensively analyzed for the economic impacts of liquor sales. Research in this area is incomplete.

There appears to be general agreement among several authors that solutions to substance abuse and other community issues should be sought within the indigenous community and not imposed from the outside (Beauvais & LaBoueff, 1985; Brown, 1985; Cooley, 1980; Mail & Wright, 1989). Innovative approaches, like the Indian Fire Fighters Drug-Free Workplace conference held in Tucson during April 1991, are seeking ways to bring larger societal programs into Indian communities. This conference focused on the concepts of drug-free work places and the importance of mutual support in hazardous work. While the risks of alcohol, tobacco, and other drugs were reviewed, the emphasis was on pride, employment, income, and safety.

Although self-determination legislation provides for tribes to resume their own political management, prevention leadership could be provided by the Indian Health Service (IHS), an agency of the U.S. Public Health Service. The IHS has a multidisciplinary health professional team that is able to provide public health education, social service support, psychosocial counseling, and medical care (as well as environmental health services). The IHS, in consultation with tribal health boards, would be a logical agency to provide the leadership and/or technical assistance for planning and implementation of targeted prevention programs.

Although little evidence exists to support the efficacy of primary prevention programs (Moskowitz, 1989), it is clear that the American health care industry is becoming progressively less cost-effective. The implications from the ever-increasing spiral of costs strongly suggest that greater attention and commitment to prevention must be undertaken (Kristein, Arnold, & Wynder, 1977). A climate must be established in Indian communities that is consistent with the surrounding majority community so that the messages offered are consistent with the public media.

It also seems essential that all non-Indian staff seeking to work within the Indian cultures need specific training in cross-cultural sensitivities and perspectives. Basso (1979) provides several clues to cultural sensitivities in his discussion of Apachean joking relationships. These might serve as guides in an orientation program.

A review of history, legislation, and vital data provide public policy implications that complement May's recommendations in this publication:

- Legislation exists that provides flexible guidance for program formulation, planning, and interagency cooperation. This must be used to develop clear and coherent strategies that make use of current research in health behavior change, health psychology,

social marketing, risk assessment and management, health communications, and targeted interventions. Several long-range risk-reduction programs exist that can provide important information for Indian health planners (Shea & Basch, 1990).

- The legalization of alcohol provides an opportunity to normalize the sociocultural environment around the use of alcohol and other drugs. Given this change, community sanctions of “deviant behavior” can be addressed in other than law enforcement terms (May & Smith, 1988). Current approaches to prohibition are inconsistent with reality.
- Services need to be improved and coordinated that focus on: (1) high-risk children; (2) high-risk and problem families; and (3) coordinated treatment services, including well-managed aftercare programs for prevention of relapse. In this volume, May clearly makes the point that the understanding and recognition of the consequences of alcohol abuse are widely known and understood within the Indian communities. He then suggests strategies for practical community-based programs.
- Programs should be essentially community based, involving schools, health care facilities, tribal government, police, social services, and churches. Approaches should combine the strengths of enforcement, health promotion, and regulation and statute. An increased sense of self as corporate entity might provide new options.
- The federal government, in collaboration with tribal governments, should encourage the undertaking of well-designed prospective studies that test prevention strategies over time to determine what does work. Existing tribal and IHS staff, in cooperation with a major university, could mount efficient, cost-effective research.

May recognizes the reality of Indian drinking and makes practical suggestions to address the direct and indirect problems arising out of the inappropriate use of alcohol. His observations include those that are sometimes discussed but rarely set down in print. Obviously, the problem is considerably larger and more complex than can be addressed in a monograph. The importance is that it is being addressed at all. Moreover, community empowered approaches to planned interventions and formulation of public policy have implications for a wider approach that addresses all health problems. Tribal people have more than 200 years of experience with alcohol, first being subjected to a unique brand of chemical warfare and later as a learned response in the form of recreational and psychocultural release. The past does not have to be repeated

in the future. The key is: What kind of Indians do native peoples want to be in the twenty-first century?

It is never too late to embark on new paths, to look ahead, and to work for the future while drawing on the positive heritage of the past. May's courageous approach to the issues and controversies of Indian drinking reaches beyond current stereotypic responses and shotgun solutions to recommend specific strategies and ways to initiate change. There is no doubt that his paper will stir up a hornet's nest of buzzing, some stinging rejoinders, and a great deal of discussion. Concerned and thoughtful individuals welcome this dialogue.

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ALCOHOL POLICY CONSIDERATIONS FOR INDIAN PEOPLE

JAMES W. THOMPSON, M.D., M.P.H.

In a thoughtful and well-documented paper, Dr. Philip May calls our attention to the need for a proactive and aggressive public policy stance in Indian communities toward alcohol abuse and dependence. He outlines three important approaches: controlling the supply of alcohol, shaping the drinking practices of Indian people, and reducing the physical, social, and environmental risks of drinking. In addition to presenting these approaches, May debunks several myths about alcohol use among Indian people. These include the myths that a greater proportion of Indians than non-Indians drink, and that alcoholism is different in Indians than in other people. He points out that simply educating Indian people about alcohol is not sufficient to rid Indian communities of alcohol-related problems. Also, May correctly stresses the importance of a total community approach to alcohol-related problems, as well as the need for data collection and evaluation.

May's discussion is scholarly and as free of ideology as is perhaps possible. The result is a paper that is rich with information and carries the field a step closer to effectively dealing with alcohol-related problems in Indian communities. There are, however, several areas of concern. The first of these is the conceptualization of "prevention" and the "public health approach" (after Beauchamp, 1980). As presented, these do not fit well with some aspects of alcohol use and misuse. Second, the way in which the Indian population is presented may lead to some unintended negative consequences if misinterpreted by readers. Third, May's definitions of alcohol-related problems are somewhat confusing. And fourth, although the last portion of the article gives an important review of steps a community might take in formulating an alcohol policy, it falls short of helping communities spell out exactly what they need to do in designing and implementing such a policy.

Prevention and the Public Health Approach

Although the invocation of "prevention" (usually meaning primary prevention) has a seductive ring to health policy-makers and persons

working in community health settings, primary prevention has, in fact, had little success in most areas of medicine. Infectious disease is perhaps the only area in which primary prevention has been an unqualified success. With regard to the mental disorders (including substance abuse), although one often hears strong ideological support for prevention programs, there has been little demonstration of success. At present, there is not a single DSM-III-R mental disorder (American Psychiatric Association, 1987) that can be prevented from occurring. It is true that substance abuse and dependence can be prevented by totally abstaining from such substances, but accomplishing abstinence in entire populations is a goal that has thus far proven elusive.

In general, the lack of success in preventing mental disorders is so complete that any shifting of existing resources towards primary prevention programs is highly questionable. But in the case of substance abuse, three facts make such shifting a reasonable consideration. These facts are the widespread nature of the problem, the serious consequences which can result, and, most important, the relatively poor record of treatment efficacy. However, if resources are to be shifted towards prevention, several groups of caveats must be entered into the discussion.

A Realistic Outlook

The first point is that the primary prevention of alcohol-related problems is an enormous task. Communities clearly need to break out of the fatalism that is so often the case regarding alcohol, but a swing to the opposite extreme (i.e., believing that prevention would be easy, if only it were tried) is not useful either. A second caveat is a lesson that was clearly demonstrated in the Alkali Lake experience (Alkali Lake, undated), and is alluded to by May and by Beauchamp (1980). That is, before actual programs are instituted, a great deal of work must go into building the political power-base necessary for broad social change. (In fact, May's suggested approach might be more accurately called "community organization and consensus building," rather than "prevention.") Finally, Indian communities must be prepared for setbacks and must have strategies for dealing with such setbacks. And communities must not only learn from one another, but also from culturally sensitive consultants who specialize in community organization, prevention, and clinical care.

A Focused Approach

Also related to primary prevention, any programs formulated must contain a clearly identifiable intervention that is to be focused upon a specific problem or risk factor (e.g., concomitant depression, low socio-

economic status, unemployment, family disruption) and which targets a specific target group (e.g., sixth grade children who are not alcohol users). Vague, unfocused programs are essentially worthless.

Another important point about focused programs is that even though much of the "public health approach" relates to populations, most prevention programs require attention to the individual at some point (for example, to give an immunization). The challenge is to know when to apply strategies that are population oriented and when to move toward interventions with individuals.

Also, as May points out, it is essential to set up data-oriented surveillance mechanisms and formal evaluations. These let a community know the results of their efforts and allow the generalization of successes to other communities. But surveillance and evaluation are impossible with a poorly conceived program. For example, a drop-in center that serves nonalcoholic beverages to all youth in a community cannot be evaluated as a prevention effort. Even if alcohol problems among youths in the community decrease, there is no defined intervention focused on a specific risk factor or on a specific target group. Therefore, there is no way to know whether the program was linked to changes in the prevalence of problems in the community.

Dealing With All Levels of Prevention

It is important to recognize that policy changes must be instituted at all levels of prevention: primary (the prevention of onset of disease), secondary (early intervention and active treatment), and tertiary (prevention of relapse, including rehabilitation) (Manson, Tatum, & Dinges, 1982). There have been rare instances when one change in public health policy accomplished a primary prevention goal. An example is removing the handle of the Broad Street pump during a cholera epidemic in London (MacMahon & Pugh, 1970). But in this example, everyone was getting the same disease from the same point source. Removing access to alcohol is in some ways similar to removing that pump handle, but then the analogy breaks down. Alcohol problems are not the same in every person afflicted. For example, May describes differences in behaviors in persons with the same blood alcohol level as due to social and cultural factors. These factors are somewhat different in each person. He also ignores individual variation due to genetics and upbringing, and differences in the status of the individual brain (e.g., due to head trauma or chronic substance use). In addition, all alcohol problems do not originate from the same source. Some individuals may start to drink because their parents taught them that this was an acceptable coping mechanism;

others because they have a major depressive disorder and are “self medicating”; still others because they are addicted to the substance and cannot stop without help; and so on.

The bottom line is that alcohol problems cannot be approached in the same way in every case. Therefore, multiple approaches must be taken, including primary prevention, clinical treatment, and rehabilitation. This is implicitly recognized by May, as he includes emergency medical services and training in cardiopulmonary resuscitation in his discussion, which are certainly not primary prevention. But he does not stress the need to create policy and programs at all of these levels.

Secondary Prevention

Policy changes are badly needed in the delivery of “mental health” and “alcoholism” services to Indians. Increased funding is necessary, as is an increase in well-trained professional staff to provide Indians with state-of-the-art care (Indian Health Service, 1989). In addition, coordination between the mental health, alcohol, and general health programs is essential (Thompson, Walker, & Silk-Walker, in press). Because of poor funding, inadequate staffing, and poor coordination, many Indian people are effectively denied state-of-the-art psychiatric care. This is not only important in the delivery of services to primary substance abusers, but also in services to the dually diagnosed, who represent a large population (Ross, Glaser, & Germanson, 1988).

It also should be recognized that the treatment of certain psychiatric disorders (e.g., anxiety and mood disorders) may be among the best programs for the primary prevention of substance abuse. That is, anxious or depressed persons who “self medicate” with drugs or alcohol might never turn to substances if he or she receives appropriate care early in their illness.

Preventing What?

A final concern about prevention is one to which May indirectly alludes. It is important for a community to understand what it is trying to prevent (in planning either primary, secondary, or tertiary policy or prevention programs). Is the goal to prevent (1) all alcohol use; (2) only some kinds of alcohol use; (3) alcohol abuse; (4) alcohol dependence; (5) negative behaviors while under the influence; (6) negative sequelae of chronic use; and/or (7) relapse? Strategies, policies, and interventions may be very different, depending on which of these is the goal.

Diversity and Similarity Among Indian People

May makes it clear that the belief that all Indian people are alike is a myth. But he then presents data that may contribute to this very myth. These data either group all Indian people together or place them into broad geographic subgroups. I fully understand that the need to have enough cases to calculate reasonable rates places pressure on the investigator to use more diverse groups than he or she would like. But such data tend to perpetuate the pan-Indian myth. When an investigator finds it necessary to do this, many more caveats are necessary. May also makes nonquantitative statements that tend to overgeneralize about Indians. One example is the statement (which I question *per se*) that "most Western Indians live in reservation areas."

A related problem is that May (by design) leaves out large groups of Indian people — e.g., those in the Eastern United States; rural Indians not on or near reservations, such as Oklahoma Indians; and urban Indians. The focus of May's work is understandably on western reservations. But there is a danger that other groups will be seen by the reader as essentially similar to the groups May addresses, or they may be ignored altogether. Again, more caveats are necessary.

Conceptualizing Alcohol Problems

May's terminology is somewhat out of date and is confusing. He appears to use the terms "alcohol abuse" and "alcoholism" as equivalent, respectively, to "sporadic" and "chronic" use, and these as equivalent respectively to "nondependent use" and "use with dependency." This is problematic, since, for example, monthly binges represent a chronic pattern, although there is no dependence. The psychiatric nosology is somewhat in flux on this point, but the use of the terms "alcohol abuse" and "alcohol dependence" more accurately reflect present day DSM-III-R terminology (American Psychiatric Association, 1987). The use of language is important here. May's use of the term "abuse" as opposed to "alcoholism" appears to let those who "only abuse" off the hook as not having a disorder that requires treatment. As another example, it is not clear why homicide, suicide, and car accidents are considered only "alcohol abusive" rather than as occurring in acute intoxication, abuse, and dependence. Chronicity does not protect an individual from such experiences.

The use of DSM-III-R terminology as a standard may not appeal to those who disagree with its philosophy or criteria. But the use of standard terminology that is relatively well operationalized would help assure that all policy-makers and program planners are communicating about the same problems. This would be no small accomplishment.

Another comment on definitions is that “addictive personality” is not a recognized entity. May’s use of the term seems to imply that some individuals, because of their personality structure, cannot be rehabilitated. This may be the case, but a community that is planning policy change would be unwise to write off a large group of afflicted persons before even starting.

A final issue concerning alcohol definitions is the distinction between a *policy* of prohibition versus abstinence by a given individual. As May states, when a population or a community as a whole is contemplating a policy shift, total prohibition will not be the answer for all. It is important for each community to deal with alcohol problems in its own way, including the possibility of allowing some drinking behaviors. Of course, it is also important that a community with a high prevalence of alcohol abuse and dependence not see what is normative, i.e., common, as “normal.” When thinking of *individuals* with alcohol abuse or dependence, however, it would be unfortunate if some read May’s statements about community policy formulation as endorsing controlled drinking by individuals with alcohol problems, a treatment strategy that has been roundly discredited (Pendery, Maltzman, & West, 1982; Wallace, 1990).

Spelling Out the Tasks

The final part of the May article provides communities with important guidelines to follow in formulating an alcohol policy. Still, if a community is to put some of May’s suggestions into practice, it will need much more specific guidelines and perhaps will need technical assistance. A community leader who reads the article may well feel overwhelmed with the extensive list of possibilities presented. One must always avoid a paternalistic stance, but the truth of the matter is that most Indian leaders are not trained in policy analysis, alcohol studies, or planning and evaluation. In addition, communities are often so embedded in the problem that they cannot see obvious possibilities for policy formulation or new program initiatives. An outside consultant can help with such process issues and with content. Even after a community has formulated and operationalized an alcohol policy and has created programs, there is a need to maintain those programs, to set up surveillance mechanisms (Thompson, Larson & Moscicki, unpublished manuscript) and formal evaluations, and to adjust policy as is appropriate. Consultants on evaluation (who, of course, must be culturally sensitive) can provide technical expertise, but also can help to dispel the still all-too-common attitude that “we’re too busy to evaluate our work, and besides we already *know* we’re doing good.”

Conclusion

Perhaps the most important contribution made by May is his implicit and explicit call to put aside ideology and to collaborate in finding answers. It is very easy to lapse into an ideological stance related to alcohol problems and treatment, prevention and clinical care, or approaches to community organization. But the problem before us is too serious and difficult to allow ideologic discussions to rule the day. Fighting one another at the expense of dealing with the basic problem at hand has never served Indian people well. Perhaps all can express their beliefs as hypotheses, rather than as gospel, and adopt as a basic stance that we must collaborate to try *something*, even if everyone is not in total agreement. If this can be done, we will we well on our way to successfully dealing with alcohol problems in Indian communities.

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ALCOHOLIC BEVERAGE CONTROL POLICY: IMPLEMENTATION ON A NORTHERN PLAINS INDIAN RESERVATION

MARK C. VAN NORMAN¹

Dr. Philip May's article in this volume, "Alcohol Policy Considerations For Indian Reservations and Bordertown Communities," represents a valuable contribution to the public debate concerning alcohol abuse on and near Indian reservations, and the range of policy options available to Indian tribes. As a practitioner in the field of Indian law, I am in substantial agreement with the main themes of the article. Therefore, this comment will, in light of some of Dr. May's major themes, briefly examine: (1) federal regulation of liquor traffic and the authority delegated to Indian tribes to regulate the use and distribution of liquor throughout their territories; (2) the need to dispel the "myths" surrounding Indians and alcohol abuse; and (3) the experience of one Northern Plains Indian tribe in fighting the "War on Alcohol Abuse."

Historical Background of Indian Country Liquor Traffic and Tribal Authority to Regulate Liquor

Alcohol abuse has been a "public health" concern for American Indians since liquor was first introduced into North America by the Europeans. Historically, liquor traffic with American Indians has been heavily regulated.² "Congress imposed complete prohibition by 1832,"³ but federal liquor laws did not stop the flow of liquor into Indian country. The U.S. Agent at Fort Snelling wrote in 1833: "Whiskey has been transported in carts from Prairie Du Chien to the Forks of Red Cedar and thence to the Des Moines River & from the same point pushed into the country along the Mississippi, and Rivers St. Peters. Many lives have been lost in consequence among the Indian tribes."⁴ Indeed, on occasion, federal agents distributed liquor to Indians during treaty negotiations.

Federal and tribal efforts to enforce the prohibition against providing liquor to Indians were later increased,⁵ but prohibition inadvertently added to problems of alcohol abuse among Indians by promoting a "binge" style of drinking, i.e., sporadic, heavy misuse of alcohol.⁶ In 1953,

Congress passed Public Law 277, codified as 18 U.S.C. § 1161, to end the discriminatory effects of the federal prohibition against liquor sales to American Indians through a concurrent delegation of authority to the states and the Indian tribes “to regulate the use and distribution of alcoholic beverages in Indian country.”⁷ Thus, Indian tribes have the power to regulate the use and distribution of alcoholic beverages throughout their territory; as May explains, with this power comes the potential for creative resolution of alcohol abuse on Indian reservations.

Dispelling Myths About Indians and Alcohol Abuse and Educating the Public About Available Regulatory Options

Common, negative misconceptions about Indians and alcohol inhibit effective policy-making by polarizing public debate around the issue of legalization versus prohibition.⁸ As May points out, many people share the erroneous beliefs that (a) Indians are more susceptible biologically to alcohol abuse than other ethnic groups, and (b) a greater proportion of the Indian population uses alcohol than other racial or ethnic groups. It is important to dispel these “myths” because they tend to deflect policy-makers from their desired goals.

A 1985 joint IHS/tribal study conducted on the Cheyenne River Sioux Reservation confirms that the stereotypical beliefs regarding the prevalence of alcohol use among Indians are false. As a percentage of their respective populations, fewer tribal members (45.9%) drank alcohol than neighboring non-Indians (61.0%). The study also demonstrated, however, that tribal members who drank alcohol were more likely to engage in “binge” drinking than non-Indians (37.1% tribal members versus 28.7% non-Indians had five or more drinks on any one occasion in the prior month; 14.6% tribal members vs. 10.1% non-Indians had sixty or more drinks per month). Therefore, tribal members suffered death from alcohol-related injuries at rates several times higher than the general population: suicide 5.6 times higher; homicide 2.9 times higher; accidents 4.1 times higher.⁹

These facts, consistent with the studies described by May, indicate that although the prevalence of drinking among tribal members may be lower than neighboring populations, “the proportion of problem drinking among those . . . who do drink is consistently higher . . . than in the general U.S. population.” Therefore, policy formulation should focus community attention on the range of policies available to change unacceptable drinking behavior (including drunk driving, public intoxication, violence, and drinking while pregnant), and the ability of the community to tailor those regulatory policies to the needs of the community.

Response of the Cheyenne River Sioux Tribe to the Problems of Alcohol Abuse Within Its Territory

The exercise of tribal sovereignty, as May explains, will be most effective in fighting alcohol abuse when a clear, well-defined policy is adopted and effectively enforced. Members of the Cheyenne River Sioux Tribe identified alcohol abuse as the number one public health concern on the Reservation in 1985, and the Cheyenne River Sioux Tribal Council responded by enacting a clear law against drunk driving and imposing mandatory sentences on violators. Tribal police have vigorously enforced tribal laws against drunk driving; according to the IHS, the positive effects of tribal efforts can be seen in reduced motor vehicle accident mortality rates, which dropped from 56.5 per 100,000 for the years 1983 to 1985 to 48.3 per 100,000 for the years 1985 to 1987.¹⁰

In 1987, the Tribal Council adopted a more comprehensive approach to alcohol beverage control, declaring a War on Drug and Alcohol Abuse and establishing the goal of freeing the reservation of such abuse by the year 2000. In furtherance of its goal, the Tribal Council resolved to:

1. "[P]ursue state, federal, local and private sector funding to institute comprehensive regional alcohol and drug prevention programs utilizing elders, concerned volunteers, Lakota people and youth in each District,"
2. "[P]ass ordinances against alcohol and drugs and strictly enforce these ordinances through [the tribal] courts,"
3. "[Establish in] each school in each District . . . a comprehensive drug prevention program," and
4. "[Set] an example to our children and to each other [by prohibiting] alcohol [possession or sales] at any Tribal function."¹¹

Tribal agencies, including the tribal police department, tribal mental health department, tribal alcoholism treatment program, and the tribally controlled community college, established joint working groups to implement the Tribal Council's policies. At the same time, the tribe asked for assistance from the federal government to prevent the establishment of two "3.2 bars" near tribal housing projects, but the request was denied. The tribe then determined to use its own regulatory power to prevent the opening of these establishments. Pursuant to the congressional delegation of authority to regulate Reservation liquor traffic and its inherent sovereignty, the Tribal Council amended the Alcoholic Beverage Control Law to require, *inter alia*, all liquor establishments on the Reservation to obtain a tribal license.¹² The owners of the proposed 3.2 bars were informed that they would not be granted tribal licenses, and they voluntarily chose not to open.

Several liquor establishments operated by non-Indians on the reservation, however, refused to comply with the Alcoholic Beverage Control Law, although they have substantial business relations with tribal members. Therefore, the tribe sued them in tribal court. The testimony at the trial demonstrated the need for tribal regulation of reservation liquor traffic. The operations of the unlicensed liquor establishments were shown to have demonstrably serious, negative effects on the tribe and tribal members, including causing or contributing to the following:

1. Economic hardships, including unemployment and the deprivation of the essentials of life, due to alcohol abuse;
2. Alcohol-related elderly, spousal, and child abuse;
3. Alcohol-related disease, injuries, and fatalities;
4. Fetal Alcohol Syndrome and Fetal Alcohol Effect; and
5. Burdens on the tribal health care delivery system (90% of major trauma is alcohol-related), the tribal police (90% of arrests are alcohol related), the tribal courts, and other tribal agencies.¹³

Furthermore, the tribe demonstrated that the unlicensed liquor establishments were irresponsible in the operation of their businesses. For example, one bartender testified that a person could safely consume 6 to 10 drinks or more in one sitting. Another bartender opened at 7:00 a.m. every day of the week, including Sundays, cashed Bureau of Indian Affairs general assistance checks and accepted the proceeds of those checks in return for liquor, all in violation of tribal law.

Significantly, testimony at trial indicated that the tribe's War on Alcohol Abuse has had initial success. For example, one expert testified that the tribe's efforts, including the operation of Drug Abuse Resistance Education (D.A.R.E.) programs by the tribal police in the junior high schools, had contributed to a 30% reduction in students at-risk for drug and alcohol abuse on the reservation between 1985 and 1989.¹⁴ Based on this record, the Cheyenne River Sioux Tribe Superior Court concluded that the licensing and regulation of liquor establishments were essential to address the problems of alcohol abuse on the Reservation, and ordered the defendants to come into compliance with tribal laws or cease doing business.

Conclusion

Despite these initial successes, the War Against Alcohol Abuse has demonstrated to the Cheyenne River Sioux Reservation community that there is no single solution to the problem of alcohol abuse. Tribal law enforcement, court systems, schools, and voluntary community organi-

zations must work together, and the effort must be dynamic — ready to change to meet changing circumstances — if the tribe is to win the fight against alcohol abuse.

Furthermore, the tribe has also come to realize that tremendous resources are needed to establish the necessary education, enforcement, prevention, and treatment programs. Federal funding has proved inadequate. Increased funding is essential to the successful implementation of the tribe's comprehensive approach to the problems of alcohol abuse, especially to establish much needed inpatient treatment facilities and halfway houses on the reservation. To provide the necessary increased funding for tribal alcohol treatment programs, the tribe has begun the process necessary to implement an excise tax on all alcoholic beverages sold on the reservation. Such a tax is expected to also have the beneficial effect of reducing overall liquor consumption.

Other proposals soon to be implemented include mandatory server training, mandatory warning signs setting forth the dangers of drunk driving and drinking during pregnancy, the elimination of drive-up windows, and a "dram shop" law. As the tribe gains experience in this difficult regulatory arena, its regulatory approach is becoming more comprehensive, more cohesive, and more effective. As May urges communities to do, the Cheyenne River Sioux Reservation community is working out its own battle plan for the War Against Alcohol Abuse, gaining knowledge and insight from its own experience and the experience of others. So far, the results have been encouraging.

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Notes

1. Mark C. Van Norman is a 1986 graduate of Harvard Law School and a member of the Cheyenne River Sioux Tribe. He served as Attorney General of the Cheyenne River Sioux Tribe in 1989 and 1990, and has been with the law firm of Greene, Meyer & McElroy, P.C., since February, 1991.
2. *Rice v. Rehner*, 463 U.S. 713, 722 (1983).
3. *Rice v. Rehner*, *supra*, at 722.
4. H. Hoover, "Whisky Trade in the History of Sioux Country Since 1802," *Platte Valley Review*, vol. 19, no. 1 (Winter 1991), p. 14, quoting Letter of Lawrence Taliaferro to William Clark dated August 15, 1833.
5. H. Hoover, *supra*, at 20.
6. Statement of Rep. John J. Rhodes (Arizona), Hearings on H.R. Doc. No. 1055 before the Subcommittee on Indian Affairs of the House Committee on Interior and Insular Affairs, 83d Cong., 1st Sess. (March 18, 1953) at 2-4 ("I do know, however, of my own knowledge that every responsible person who has dealt with the Indians of Arizona believes that the continued prohibition of the sale of legal liquor to these Indians is detrimental. . . .

[S]ome of the potions that come out of these tribal stills are rather amazing in their permanent effect on the individual. Further, the Indian, when he buys a bit of liquor, is almost in the same situation that perhaps a few other people were in the days of prohibition when, as soon as the bottle came into one's hands, it was immediately consumed before somebody came around and took it away.").

7. *Rice v. Rehner*, *supra*, at 715.
8. It is the author's experience that misconceptions about Indians and their susceptibility to alcohol misuse, which are held by many tribal members as well as non-Indians, are related to the recurring idea that prohibition, rather than regulation, is necessary to address the health problems caused by alcohol misuse among Indians. Indeed, during the course of the Cheyenne River Sioux Tribe's litigation against unlicensed liquor dealers on the Reservation discussed below, the liquor dealers repeatedly asserted that federal prohibition only worsened the problems of alcohol misuse and therefore, the Tribe should not even attempt to regulate the defendants' liquor establishments.
9. The figures cited in the preceding paragraphs are drawn from the *Planned Approach to Community Health, Program Summary* (Aug. 1988), produced by the Cheyenne River Sioux Tribe Health Dept. and the Aberdeen Area Indian Health Service.
10. Testimony of Dr. Terrence Sloan, Aberdeen Area Director of the Indian Health Service. Trial Transcript, vol. 1, p. 154.
11. Cheyenne River Sioux Tribe Resolution No. 313-87-CR.
12. Cheyenne River Sioux Tribe Ordinance No. 48, Alcoholic Beverage Control Law.
13. See generally, *Cheyenne River Sioux Tribe v. Dupree, et al.*, C-224-88 (decided Jan. 8, 1991), appeal docketed Cheyenne River Sioux Tribe Court of Appeals, February 7, 1991; see also, *Rice v. Rehner*, *supra*, at 724 (discussing "spillover effects" of reservation liquor traffic on surrounding state).
14. Testimony of Prof. William Wolf, Colorado State University. Trial Transcript, vol. III, p. 148.

LET THE DEBATE, STUDY, AND ACTION CONTINUE: RESPONSE TO TWELVE CRITIQUES

PHILIP A. MAY, PH.D.

First of all, I would like to thank Dr. Spero Manson, editor-in-chief, Judy Kuntze, former journal manager, and Iva Roy, current manager, for the initial evaluation of the paper and for devoting the time, energy and space to this forum. I believe this opportunity will substantially advance the topic of alcohol policy for Indians.

My first reaction to the twelve critiques submitted in response to the alcohol policy paper was surprise and gratification at how most respondents agreed with the major direction of the prevention suggestions. It may be that alcohol policy for Indians will be a topic of importance and an area of emphasis in the coming decade. I certainly hope so, and I thank the respondents for taking the time to review the manuscript.

Common Themes

Most of the stronger criticisms or areas of disagreement dealt with degree of emphasis. The three most common themes were: (1) that there was not enough emphasis on change in the primary groups; (2) that issues affecting individuals were not addressed; and (3) that I did not guide tribal leaders enough.

That the most profound and permanent social changes that affect public health occur in primary groups is well established. I firmly believe this, and believe it applies most directly to behavioral health issues. The vast majority of the reviewers seem to share this belief, and most seized on this statement in the paper. But the common criticism was that I did not go far enough in documenting how this change in family and sociocultural variables is facilitated or made. Frankly, I do not know an exact path or method for such change. I do know that individuals, families, and tribal communities must work on this within their own social and cultural contexts utilizing the strengths that exist now and were also there in the past. Studies of success (see Neumann, Mason, Chase, & Albaugh, 1991) and successful family and peer group intervention programs must be pursued, and ideals of success must be brought into the debate on alcohol problems.

The paper I wrote for this volume addresses alcohol problems from the community level. Broad community initiatives will eventually impact primary groups. Primary groups do react to community standards as put forth in policies, laws, knowledge bases, and other milieux. They then translate and adapt the information and perspectives for smaller groups. This is why large smoking cessation initiatives have worked with many people and groups. Further, the paper is intended to document the successful prevention efforts published in the literature, and they typically tend to be large-scale, community-based, policy-oriented efforts. The challenge I would like to make to other scholars/individuals is this. Examine and summarize the knowledge base on family and primary group change, write it up, and disseminate it to those of us who do not specialize in these approaches. There needs to be a coordination of approaches from several levels of human interaction.

A second theme in the critiques is that the paper did not address individual issues sufficiently. Again, that was not the intent of the paper; community-based, policy-oriented issues was the focus. Yes, there is variation in individual drinking style among Indians. It is affected by a variety of influences such as genetic variation, family characteristics, peer groups, exposure, learning, spiritual beliefs, and psychiatric variables. But all individuals live within a web of influences in society and community. If the community and society reflect consistent, predictable, powerful, and positive messages regarding alcohol use and abuse, individual variation and problem behavior are reduced. Prescriptive and proscriptive norms and policies not only affect exposure to alcohol and substances but over time become part of the individual's knowledge, attitudes and beliefs. They therefore guide his/her behavior preventing some individual pathology.

Again, a challenge is in order here. The extant behavioral science understanding of Indian alcohol abuse needs to be pulled together and more objectively understood from a comprehensive etiological point of view. A beginning exists in the document *Indian Adolescent Mental Health* (U.S. Congress, 1990), but a more explicit emphasis on substance abuse is needed. Furthermore, several groups of authors/scholars have published a number of insightful works in this area (see for example, Oetting & Beauvais, 1989; Winfree, Griffiths, & Sellers, 1989), but a broader and more general knowledge base is still needed. Such an understanding can be brought about from further testing, coordination, and a great deal more sharing of ideas and results between groups of scholars. Many scholars tend to ignore the works of others, the studies and variables are rather particular to each research group, and the use of the results across settings has not been frequent enough.

The third major theme is that the paper does not guide tribal leaders enough, that the paper is too general and may confuse those who are not familiar with the topics addressed. I have tried to make the paper as clear as possible and may not have succeeded. But I have great confidence in tribal leaders, their advisors, and in the body of public health officials and scholars. These people can work together to take this information and apply it in the most culturally relevant and appropriate terms possible for their communities. No one blueprint will work for every community. In a paper such as this, one can only lay out the options for consideration, and that is why I wrote the paper. It is a call to promising action with a documentation of possibilities.

The most gratifying part of the whole review process was the reviews that document and explain how action has been taken in various communities. The pieces by Norman Dorpat, Candace Fleming, Carol Lujan, Patricia Mail, Ron Peters, and, particularly, Mark Van Norman are exactly what I had hoped would emerge in some of the reviews. Each of these authors gives specific examples of successful programs of a preventive nature, and these examples give credence to the wide array of approaches, which can be implemented under the particular conditions. Some involve schools, some involve communitywide public initiatives, and some involve legal and criminal justice measures. I hope that all readers of this volume will focus on the positive tone and motivating ideas in these reviews, and also on the many similar programs described in the bibliography of the main paper.

Specific Issues Raised

There are several specific issues raised by reviewers that I must briefly address. This is done in a positive vein and is not intended to be defensive or hypercritical.

Dwight Heath raised the issue that sociocultural change will go much farther in reducing and preventing alcohol problems than the measures I proposed in the figures of the paper. He is correct, and the solutions in the paper are intended to be stimuli for sociocultural change. They are limited if taken individually and considered on a static basis, but they are dynamic and should be considered only as parts of a larger group of interventions for socio-cultural change. I believe Dr. Heath has and will continue to show how sociocultural change can be used to prevent alcohol problems. We are not in opposition, but I am not sure that he shares, or appreciates, or is as optimistic about, the role of policy measures in stimulating sociocultural change as I am.

Dr. Heath also makes a strong statement about the value of legalization of alcohol on reservations and is puzzled why I did not take a stronger

stand. I believe legalization can be a tremendous tool for many communities. Indeed, the majority of the policies in the paper are contingent on legalization. Many tribes should legalize to most fully improve upon control over alcohol-related problems. But alcohol legalization is not a panacea any more than prohibition. Laws and policies must be matched to the local conditions; any community alcohol initiative must be comprehensive, vigilant, and dynamic. A simple policy that is none of these will fail whether it is legalization or prohibition. Therefore, I was careful not to imply an easy solution and utilize polarizing words such as legalization or prohibition. To do otherwise would not have been wise for raising the issue to Indian populations or for encouraging debate.

Aron Wolf suggests that my discussion on physiological susceptibility ignores the “blackout” issue as it affects Alaska Natives. My discussion of psychological susceptibility is specifically aimed at inherited, basic metabolic, and liver structural issues. These traits vary somewhat among individuals, but the averages from ethnic groups are not significantly different (Reed, 1985). Life and drinking experience modify a person’s processing of alcohol making those with particular diets, body weights, prior and frequent drinking experience, and variable states of health different in the face of alcohol. Blackouts are a behavior/experience that results mainly from life experience, not inherited/genetic traits. To quote one of the articles used in Dr. Wolf’s critique, “Blackouts were positively associated with severity and duration of alcoholism, extent and duration of alcohol consumption per drinking episode, capacity for drinking large amounts, ‘loss of control,’ neglect of meals, gulping drinks, and a history of head trauma” (Goodwin, Crane, & Guze, 1969). Blackouts are, therefore, mainly a product of life-style, not inheritance and, therefore, not related to the discussion. Further, the one controlled study Dr. Wolf quotes is the article by Fenna, Mix, Schaefer, and Gilbert (1971), which has been highly criticized as being flawed. All of the articles addressing physiological issues quoted in the policy paper are controlled, state-of-the-art studies that specifically relate to inherited susceptibility exclusive of prior drinking or sociocultural experience. Having reviewed the bulk of those references cited by Dr. Wolf, none rule out prior drinking experience or sociocultural considerations in any structured way, and some do not even touch on any of the issues raised in the critique (e.g., Phillips, Wolf, & Coons, 1988). In light of the existing, best evidence, to perpetuate the arguments of innate physiological susceptibility for Indians or Natives is pernicious. Such arguments merely obfuscate and mystify the problem, increase fatalism, and therefore delay solutions. It is virtually impossible to begin prevention programs at all if these myths are extant in the population (May & Smith, 1988).

James Thompson raises two issues that I will address. He claims that the primary prevention model works best for infectious disease and may not apply to alcohol problems. I believe that Bloom (1981) and many of the other authors quoted in the paper contradict this statement in a variety of ways. Further, mental health and substance abuse problems are not synonymous when it comes to the applicability of prevention. Mental health and substance abuse issues are frequently confused in his discussion. Secondly, Dr. Thompson states that the Indian health data used in the paper leave out Oklahoma Indians and urban Indians. This is not true. Table 2 includes all Indians in 33 reservation states, including Oklahoma and both rural and urban data for most of these states. In Tables 3 and 4, the data include all Indians in and surrounding reservation areas (by county) served by an IHS program or contract program. Furthermore, IHS now produces service unit specific data which many tribes and communities can access to further specify the nature of their alcohol problems. I would encourage all communities who can get such data to do so. The opportunities for considering the policies in the paper are immense, and any community, Indian or non-Indian, rural or urban, or eastern vs. western, must assess whether they apply to their setting and how. That is why no one policy was spelled out to fit all Indians or all situations.

Moving on to Levy's critique, a very good point is made about comparison groups. Levy reminds us all that it is generally preferable to compare Indian data to other residents of the states and counties adjacent to the Indian populations. This is truly preferable in many studies, and one should strive to do so. In this paper the opening presentation of mortality data was to set the stage for the prevention discussion and to define *patterns* of death that were substantially different from mainstream patterns. As Dr. Levy points out, in many rural, western U.S. areas, trends of suicide and other behavior-related problems may have a similar etiology and period prevalence among Indians and non-Indians. But this is not always the case, and I suspect that it is least true regarding highly alcohol-specific variables. For example, Indians and non-Indians in the states of Montana and New Mexico, and in counties therein, have very different rates of death for motor accidents, and alcohol relatedness and blood alcohol levels at death (May, 1989). Further, Levy and Kunitz's own work would lead one to suspect a divergence in this pattern regarding rates of cirrhosis of the liver.

The final issue that I will address is found in the review by Delores Gregory. Dr. Gregory calls 1986 a "watershed year" in alcohol and behavioral health awareness among Indians because of IV drug use, AIDS, and the anti-drug laws. While that may be true in the Pacific Northwest, other, more remote areas of the West seem to be "business

as usual.” None of the three forces mentioned are large issues among the Southwest Indian populations and, it seems, among many other areas such as the Plains. It may be that the watershed year is yet to come in many communities and the awakening to these health risks is only prevalent among health professionals. To date, many tribal organizations have not seriously considered most of the issues of policy mentioned in the paper, and alcohol abuse intervention/prevention efforts are limited to small treatment programs and school-based curricula.

Concluding Remarks

This exercise in research, writing, response, and reaction has been interesting. I am gratified that it has stimulated twelve interesting and generally positive reviews from peers and colleagues. I hope that it will do the same among tribal leaders and their advisors as well.

One major problem with prevention of substance abuse is that it is complex and complicated. That is a truth well told in dozens of articles and books reviewed for this paper. As such it may be a truth that will scuttle prevention efforts in many communities.

The truth is sometimes a poor competitor in the market place of ideas
— complicated, unsatisfying, full of dilemmas, always vulnerable to misinterpretations and abuse.

— George F. Kenman, *American Diplomacy 1900–1950*, 1951

Most people want a simple solution and there are none. And as Fred Beauvais has pointed out, we are not always able to implement all that we know. I would like to see us all try harder. But debate and consideration of the many approaches from the experience of other humans will be necessary for tribal groups and communities if they are to gain more control over alcohol problems. Too often we scholars, health officials, and citizenry alike have focused on the problems and ignored the positive actions that can be taken to deal with at least some aspects of the problem. We must move forward in a positive vein with great expectations. We should assist in the solutions. All the while we must acknowledge that there are many paths to alcohol problems and, therefore, that many solutions are possible. No one paradigm or approach will do unless it allows for embracing a multitude of directed influences. Let us move towards the goal of a broad reaching, yet comprehensive plan.

I hope, to a great degree, that the final sentence in Patricia Mail's review comes true, for opening up this area for debate is what I wanted to do. I am not so sure I wish the same for all parts of the next to last sentence.

There is no doubt that his paper will stir up a hornet's nest of buzzing, some stinging rejoinders, and a great deal of discussion. Concerned and thoughtful individuals welcome the dialogue.

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