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# APPLYING DOSE-RESPONSE THEORY TO COALITION TRAINING: UNDERSTANDING THE RELATIONSHIP BETWEEN TRAINING DOSAGE AND COALITION CAPACITY FOR COMMUNITY PROBLEM SOLVING FOR SUBSTANCE ABUSE PREVENTION

Ву

Evelyn Yang

## A DISSERTATION

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#### **ABSTRACT**

APPLYING DOSE-RESPONSE THEORY TO COALITION TRAINING:
UNDERSTANDING THE RELATIONSHIP BETWEEN TRAINING DOSAGE AND
COALITION CAPACITY FOR COMMUNITY PROBLEM SOLVING FOR
SUBSTANCE ABUSE PREVENTION

Bv

# Evelyn Yang

Coalitions are common vehicles to reduce substance abuse on a population-wide scale. Coalitions bring together diverse community representatives to work collaboratively toward achieving a common goal, and the level of skill, capacity and effort required for coalitions to be effective is quite substantial. Current emphasis is on building coalitions to be strong community problem solvers, i.e., local experts with the tools, knowledge and expertise to effectively address their own community concerns. Training has been used to help coalitions develop these skills and knowledge to be successful. However, one of the limitations with existing training studies is lack of information on how much training is needed to benefit the coalition. Dose-response modeling has been used in other fields to understand the relationship between intervention amount and intervention outcomes.

This study applied dose-response modeling to coalition training provided by a national training institute to increase understanding of the conditions under which training can increase a coalition's community problem solving capacity to successfully prevent substance abuse. A pre- and post-test study design with a control condition was used to examine the relationship between training and three elements of community problem solving capacity: coalition internal functioning, comprehensiveness of strategies, and facilitation of community changes. The following research questions were examined

in this study:

- 1. Does training improve coalition capacity for community problem solving?
- 2. What is the nature of the relationship between training dosage and elements of capacity for community problem solving?
- 3. Which type of training dosage received is the strongest predictor of each element of capacity for community problem solving?

This study found that coalitions that have received training have higher post-test levels of coalition internal functioning than those that have not been trained. Study findings indicate a weak relationship between training dosage and elements of capacity for community problem solving. High levels of training frequency, operationalized as the number of individuals attending more than one training, are associated with greater coalition internal functioning. The relationship between training and community problem solving capacity appears to be complex. Other factors including receipt of technical assistance and transfer of learning from training and technical assistance appear to be critical elements needed to build a coalition's capacity for community problem solving.

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#### **CHAPTER 1: INTRODUCTION**

Coalitions are collaborative entities comprised of various stakeholders, agencies and community groups that work together to address a common goal of improving the health and well-being of its community members and environment. Coalitions are commonly formed for public health and promotion to address some of the most challenging problems facing society such as teen pregnancy (Paine-Andrews et al., 2002), cardiovascular disease and substance abuse (Francisco, Paine, & Fawcett, 1993), substance abuse prevention (Hallfors, Cho, Livert, Kadushin, 2002; Hingson, Zakocs, Winter, Rosenbloom, & DeJong, 2005), and child immunization (Butterfoss, 2007). The fundamental premise of coalition theory argues that this country's most difficult problems are unlikely to be solved by a single agency or organization and that a collaborative response is needed (Lasker & Weiss, 2003).

Complex community health problems require comprehensive, collaborative solutions in order to achieve benefit for the entire community or targeted population. This broad degree of change, called population-level change, is the ultimate goal of coalitions (Roussos & Fawcett, 2000). Population-level outcomes represent changes in health status, behavior changes in a population sample and improvements in social indicators of well-being. Examples of population-level improvements in health outcomes include reductions in rates of domestic violence, decreases in teen pregnancy rates, and reductions in the incidence and prevalence of substance abuse among youth.

However, population-level outcomes are difficult to achieve. Evaluations of coalition efforts have shown only a limited impact in modifying behaviors at the population level (Fawcett et al., 2001; Merzel & D'Affitti, 2003; Roussos & Fawcett,

evaluation of the Robert Wood Johnson Foundation's Fighting Back Initiative, a multimillion dollar coalition initiative targeting substance abuse prevention. The evaluation found that participating coalitions were unsuccessful at reducing population-level substance abuse rates (Hallfors, Cho, Livert, Kadushin, 2002). Many comprehensive reviews of coalition efforts have concluded "only limited empirical evidence exists on their effectiveness in improving community-level outcomes" (Roussos & Fawcett, 2000, p. 370). While coalition success stories do exist, they tend to be found in individual case studies, such as a Midwest coalition's contribution to reductions in teen pregnancy rates (Paine-Andrews et al., 2002) and declines in infant mortality rates in an initiative targeting a high-risk area of Boston (Plough & Olafson, 1994 as cited in Kreuter, Lezin & Young, 2000). While promising, these study findings are limited in their generalizability to other settings and issues.

The difficulty in linking coalitions to population-level outcomes has many proposing the need to examine other more proximal outcomes signifying a coalition's success. One of the criticisms made by coalition researchers (Allen, Watt, & Hess, 2008; Green & Kreuter, 2002; Roussos & Fawcett, 2000) is that much of the previous coalition research has focused on the direct effect of coalitions on population-level change variables, such as the Fighting Back study. This has a variety of researchers (Kreuter et al., 2000; Merzel & D'Affitti, 2003; Roussos & Fawcett, 2000) suggesting that one of the reasons for the modest findings of coalition evaluations may be that improvements in widespread behaviors and community health outcomes are so far downstream that they are unlikely to be measured within the timeframe of most evaluation studies.

Consequently, efforts need to be made to determine intermediate outcomes that are more likely to be measured within the timeframe of most evaluations and that coalitions can affect more directly. By identifying and assessing relevant intermediate outcomes, success for the coalition field may be redefined in such a way to offer more realistic and appropriate targets to achieve within a fairly short time frame. Additionally, an improved focus on coalition intermediate outcomes may also provide a stronger understanding of the process by which coalitions achieve population-level change (Roussos & Fawcett, 2000).

One core intermediate outcome proposed by Roussos and Fawcett (2000) is community change, which are new or modified programs, policies and practices brought about by the coalition related to its mission. Examples of community changes include: infusing contraceptive information into abstinence only pregnancy prevention programming, expanding health clinic hours so that community members have better access to these services, and changing policy to increase the tax paid for tobacco products. These community changes represent progress toward achieving long-term goals and can be documented with reliability (Fawcett et al., 1997; Francisco, Paine, & Fawcett, 1993). Fawcett and colleagues have demonstrated this link in a variety of empirical case studies, including those of teen pregnancy prevention and substance abuse prevention coalition efforts. These cases documented the relationship between high levels of community change and subsequent reductions in the targeted public health problems (Fawcett et al., 1997; Paine-Andrews et al., 2002). Other researchers agree that markers of intermediate outcomes toward more distal health outcomes are changes in the community environment, such as the shifts in programs, policies and practices described

above (Butterfoss, 2007; Kegler, Twiss & Look, 2000). Given the time frame, it was not possible to see population-level outcomes within the scope of this particular study. However, as community change agents, coalitions are helping to bring about new and modified programs, polices and practices that address their mission. Since promise exists in the role of coalitions as community change agents, further study is needed to determine how coalitions can become the change agents that facilitate improvements in these intermediate outcomes. This study examines the role training plays to help coalitions accomplish these intermediate outcomes (i.e., community changes) indicative of coalition effectiveness. Specifically, this study investigates how training impacts a coalition's ability to facilitate these changes, and whether higher levels of training participation are associated with greater degree of community changes facilitated by the coalition.

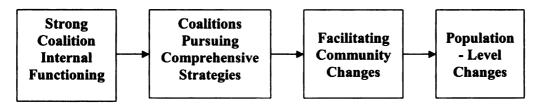
Research examining the relationship between community changes and population-level outcomes provides some indication that these community changes are important precursors of improvements in population-level health outcomes. Fawcett and colleagues (1997; Paine-Andrews et al., 2002) have demonstrated in numerous case studies that reductions in population-level health outcomes are more likely when a sufficient number of community changes have been achieved. When coalitions are effective at facilitating new or modified programs, policies and practices, such as increasing enforcement of underage drinking laws, increasing availability of contraceptives, and implementing evidence-based prevention programs, they are more likely to experience population-level decreases in targeted health outcomes, such as the reduction of teen pregnancy rates and alcohol-related crashes and fatalities. These studies provide strong examples of community changes as intermediate outcomes toward population-level outcomes.

However, it is apparent that not all coalitions are successful at facilitating community changes. Kreuter and colleagues (2000) examined 68 studies of coalition efforts to change health systems and health status. Of these, only two documented examples were found where coalitions were likely to have contributed to systems improvements, such as the establishment of a clinic in a health services initiative for rural homeless and changes in blood lead testing practices in a lead poisoning initiative. Hingson and colleagues (2005) reexamined the Fighting Back coalitions in a post hoc study, studying more closely the number of community changes these coalitions helped bring about to reduce availability of alcohol and expand access to alcohol treatment. Of the 12 Fighting Back communities included in this study, the majority were not successful at changing their community systems at high enough levels to facilitate population-level reductions in alcohol related crash fatalities.

It is critical, then, to think about how to help coalitions become active community change agents, engaged in making concerted modifications of programs, policies and practices in their communities. One approach taken by a large, national training organization is a community problem solving approach. Community Anti-Drug Coalitions of America (CADCA) is a national, nonprofit organization whose mission is "to strengthen the capacity of community coalitions to create and maintain safe, healthy and drug-free communities." CADCA houses the National Coalition Institute (Institute) that has the aim of building more effective community anti-drug coalitions through training, technical assistance and education. Since its inception in 2002, the Institute has trained over 2800 coalitions and other substance abuse prevention groups using a community problem solving for change framework based upon a model developed by the

University of Kansas (Collie-Akers, Fawcett, Schultz, Carson, Cyprus & Pierle, 2007; Fawcett et al., 2001; Roussos & Fawcett, 2000). This community problem solving approach puts solution-generation in the hands of the community who are the real experts on their local issues and the resources they can put into play to address these concerns (Lasker & Weiss, 2003). The Institute's community problem solving approach to substance abuse prevention encompasses a comprehensive theory of change that starts with building internal coalition functioning and ends with population-level reductions in substance abuse rates (see Figure 1).

Figure 1. CADCA Institute's Framework for Effective Community Problem Solving



The intent of CADCA Institute training is to improve coalition community problem solving capacity in the following areas: improving coalition internal functioning, helping coalitions pursue comprehensive strategies and activities, and helping them facilitate community changes, which then contribute to population-level changes in health outcomes. The Fighting Back study (Hallfors, et al., 2002) clearly indicates that the mere existence of a coalition is unlikely to achieve outcomes. Current research suggests effective coalitions attune to improving both internal (e.g., coalition operations, assessment and planning) and external functioning (e.g., interventions and strategies) (Foster-Fishman, Berkowitz, Lounsbury, Jacobson & Allen, 2001; Stevenson & Mitchell, 2003; Zakocs & Edwards, 2006; Zakocs & Guckenburg, 2007). This model incorporates

both aspects of functioning, also linking them to coalition engagement as community change agents, an intermediate outcome toward population-level change.

However, becoming a coalition capable of strong community problem solving is difficult, and efforts must be made to help develop coalitions develop this capacity.

Training is one important tool that has often been used to support coalitions in their development and success (Butterfoss, Morrow, Webster & Crews, 2003; Florin, Mitchell & Stevenson, 1993; Quinby et al., 2008). Coalition training is associated with improved knowledge and skills, such as understanding community risk and protective factors (Feinberg, Greenberg, Osgood, Anderson & Babinski, 2002) and coalition building and public policy action (Stevens & Lodl, 1999). Training is recommended as a critical tool to support coalitions in becoming active community change agents (Roussos & Fawcett, 2000) and appears to be an essential tool for building coalition capacity for community problem solving.

While training appears to be necessary and is occurring on a frequent basis, the coalition field still lacks information about the correct form and function of training needed to achieve optimal results. Investments in training are costly, requiring both monetary and human investments. Additionally, extensive research on training specifically for coalitions has not been conducted. How training is offered and the extent to which coalitions take advantage of training varies considerably. However, more detailed, specific information is needed on what amounts of training participation are critical for coalitions to benefit from training. This study focused on determining the relationship between different amounts of training and different types of coalition training outcomes in order to better determine how training can benefit coalitions and

how coalitions can use scare resources to make more informed decisions about how they access training.

Other fields, such as pharmacology (Calabrese and Baldwin, 2001) and psychotherapy (Howard, Kopta, Krause, & Orlinsky, 1986) have looked to dose-response theory to understand if higher amounts of an intervention, such as training, are related to better outcomes. Dose is a measure of exposure or participation in an activity or intervention, such as attendance in a youth-focused program to prevent teen pregnancy, exposure to a media campaign to reduce alcohol and drug abuse, and attendance at a training event. The link between dose and outcomes has been tested in other fields, suggesting that higher dose is associated with better outcomes; for example, greater involvement in an after-school program is related to better grades (Chaput, Little & Weiss, 2004; Marsh & Kleitman, 2002).

However, dose-response theory has not been applied comprehensively to coalition training. While coalitions are often trained as part of grant requirements (Department of Health and Human Services RFA No. SP-09-002), we do not understand how participation in training should be operationalized. Does greater attendance, as measured by a greater number of individuals trained within a coalition, lead to greater coalition capacity for community problem solving? If coalitions send a team of members to a training, does the coalition reap more benefits than one that sends just a single member? As of yet, research has not provided answers to these questions. There is little empirical evidence to enhance understanding of how training dosage should be conceptualized, nor how varying levels of training dosage relate to coalition outcomes. This study undertook the first large-scale approach to understanding this relationship and developing a

framework to understand coalition training dosage. Specifically, this study focused on determining the measures of training dosage that are relevant for coalitions and the relationship between different types of dosage and a coalition's capacity for community problem solving.

This study focused on the role one major training institute plays in helping coalitions become community problem solvers for population-level outcomes. The CADCA Institute trains on each aspect of the community solving framework described in Figure 1, and its training is designed to help coalitions improve their capacity in each component of the model. Evaluations of the Institute's model suggest that coalitions trained by the Institute are more likely to have better internal functioning, be more comprehensive and engage as community change agents (Foster-Fishman, Law & Ahn, 2008). The relationship between Institute training and coalition achievement of distal, population-level outcomes has not yet been tested. However, the Institute's evaluation findings support the training center's role in building coalition capacity to achieve community changes, the intermediate outcome toward population-level outcomes. This study continued to investigate Institute training and its relationship to building coalition community problem solving capacity, and attempted to fill a gap in the training literature by examining more closely how varying levels of training participation relate to different community problem solving capacity outcomes.

In conclusion, the purpose of this study was to understand how training increases coalition capacity for community problem solving for population-level substance abuse prevention by examining the role training participation plays to improve coalition skills and capacities in different elements of community problem solving. This study examined

how training builds coalition skills and investigated more closely the specific relationship between training attendance amount and coalition capacity for community problem solving. If training can build strong coalition community problem solvers for population-level substance abuse prevention and aspects of training attendance necessary for training to be successful are defined, then future studies that examine the entirety of the theory of change depicted in Figure 1 can be carried out (i.e., how community change triggers long-term benefits in improved behaviors and health indicators). This is necessary to fully understand how coalitions can be effective vehicles for population-level change and the key supports needed to build their capacity to do so.

To explicate the relationship between training exposure and coalition community problem solving capacity, the following research questions were examined in this study:

- 1. Does training improve coalition capacity for community problem solving?
- 2. What is the nature of the relationship between training dosage and elements of capacity for community problem solving?
- 3. Which type of training dosage received is the strongest predictor of each element of capacity for community problem solving?

## **CHAPTER 2: LITERATURE REVIEW**

Coalitions as Mechanisms to Prevent Substance Abuse

Substance abuse is a problem facing each community in America. The pervasiveness of substance abuse is apparent in how it cuts across racial, socio-economic, geographic and generational lines (Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2008). Results from the 2008 Monitoring the Future study, an annual survey on in the incidence and prevalence of youth substance use rates funded by the National Institute on Drug Abuse (NIDA), indicate that past declines in substance abuse rates are leveling off and researchers are concerned that softening attitudes among youth on the perceived risk and disapproval of marijuana and inhalant use may predict future increases in usage rates (Johnston, O'Malley, Bachman, & Schulenberg, 2008). With 47.4% of 12<sup>th</sup> graders reporting they have used an illicit drug in their lifetime, 32.1% of 8th graders reporting drinking alcohol in the last year, and 13.8% of 10<sup>th</sup> graders reporting using marijuana in the last month, the potential costs of substance abuse are enormous, especially if efforts are not put into prevention and treatment. These costs go beyond the individual and their family, affecting society as well. According to the National Highway Traffic Safety Administration (2008), while the proportion of alcohol-related traffic fatalities attributable to alcohol has been in decline in the last 20 years, as of 2005 they were still as high as 33%. Additionally, the cost of substance abuse to society is staggering; in 1992 the estimated economic cost of drug and alcohol abuse was \$245.7 billion. This includes prevention and treatment costs as well as costs accrued in the justice and social welfare systems (Harwood, Fountain & Livermore, 1999).

Starting in the 1980s, private foundations (Hallfors et al., 2002) and the federal government (Yin and Kaftarian, 1997) began to put funds into developing local community coalitions to address the substance abuse epidemic. The core belief behind this approach was that substance abuse prevention required a collaborative, communitybased solution to change conditions in the community environment, system and structures that contributed to substance abuse problems (Saxe et al., 1997). Coalitions are "a group of individuals representing diverse organizations, factions or constituencies who agree to work together in order to achieve a common goal" (Feighery & Rogers, 1989, p.1). Since no two communities are alike, the premise of coalitions for substance abuse prevention is that local, coordinated efforts best address the local, unique needs of the community. Substance abuse coalitions are comprised of multiple groups of stakeholders, often a mix of citizens, including youth and parents, service agencies, including prevention and treatment providers, public health, law enforcement, schools, and community organizations, including representatives from the faith community, businesses and volunteer groups. By encouraging collaboration among stakeholders, these coalitions take a comprehensive approach to addressing substance abuse in their communities. Recent studies conducted on substance abuse coalitions suggest that most coalitions appear to be serving rural areas with budgets of less than \$200,000 (ONCDP, 2007; Foster-Fishman et al., 2008). Coalitions vary in size from small to large (Butterfoss, 2007) and also in their focus, some focusing solely on substance abuse and others including it as a priority among larger community health issues (Stevenson & Mitchell, 2003). Substance abuse coalitions are engaged in a variety of strategies and activities, including implementing evidence-based prevention programs (Collins, Johnson &

Becker, 2007), providing information about the harms associated with substance abuse (Florin et al., 1993), and changing local policies to enforce underage drinking laws (Hingson et al., 2005).

Over time, coalitions have become very popular mechanisms for addressing substance abuse at the community level (Collins et al., 2007; Florin et al., 1993; Green & Kreuter, 2002; Hallfors, et al., 2002; Hingson et al., 2005; Stevenson & Mitchell, 2003). The Drug-Free Communities Support Program (DFC) has funded approximately 1500 coalitions since 1998 (Department of Health and Human Services RFA No. SP-09-002); the Center for Substance Abuse Prevention will be investing over \$38 million dollars to fund an additional 20 states, territories and tribal entities through their Strategic Prevention Framework-State Incentive Grants, which requires funding to be dispersed to communities to implement local, strategic efforts to prevent substance abuse (Center for Substance Abuse Prevention RFA No SP-09-011); the Community Capacity and Development Office within the Office of Justice Programs funds Weed & Seed communities, which are local coalitions engaged in law enforcement and community mobilization efforts to address both the supply and demand for drugs (Department of Justice, 2009). While the investment into substance abuse coalitions has been substantial, it represents a small portion of the overall federal budget. Regardless, much attention has been placed on coalitions as solutions to prevent substance abuse problems in this country. Even with comparably limited resources in comparison to substance abuse treatment and interdiction (Carnevale Associates, 2008), the spotlight on coalitions is intense.

Consequently, the bar for coalition success is set high. Coalitions are considered

a "population strategy", targeting an entire community to achieve the largest impact on the public health issue (Merzel & D'Affitti, 2003). As such, accountability must be placed at the population-level. While grant funding exists to create and maintain coalitions, coalitions are being held to accountability measures for long-term reductions in substance use and abuse within a population sample. For example, the Drug-Free Communities Support Program (DFC) Grant administered by the White House Office of Drug Control Policy has designated "core measures" that grantees are required to report on, which include measures of past 30-day use and lifetime use of alcohol, tobacco and marijuana among youth. Grantees are required to track and report data at the population-level for the community they are targeting with their prevention efforts (Department of Health and Human Services RFA No. SP-09-002; ONDCP, 2007; ONDCP, 2008).

While there is a growing number of substance abuse coalitions, evaluations of their ability to reduce substance abuse at the population-level are mixed. Perhaps one of the most commonly cited coalition evaluations in the substance abuse field is that of the Fighting Back Initiative, a 72 million dollar investment made by the Robert Wood Johnson Foundation (Hallfors et al., 2002; Hingson et al., 2005; Zakocs & Guckenburg, 2006). Participating communities had a great deal of flexibility in determining how to implement their grant and address substance abuse in their communities. The national evaluation of the Fighting Back Initiative examined the specific intervention strategies the coalitions implemented, the comprehensiveness of the strategies, and the coalition's success at reducing youth substance abuse. The researchers found that strategies targeting youth and community prevention outcomes had no effect when compared to matched community comparison sites. Additionally, some strategies targeting adults had

a negative effect in that adults in Fighting Back sites had worse program outcomes, such as binge drinking, than adults in non-Fighting Back sites. Furthermore, communities that implemented more comprehensive interventions were not more effective than those communities who were less comprehensive (Hallfors et al., 2002). Comprehensiveness was defined as implementing a broad array of strategies focusing on change at multiple levels and multiple targets, such as use of youth prevention programs, reducing alcohol outlet density and public awareness campaigns. Limited population-level change in health behaviors have also been found in the Community Intervention Trial for Smoking Cessation (COMMIT). While the intervention demonstrated decreases in smoking among light to moderate smokers, no changes in heavy smokers were found, the primary target group of the initiative (COMMIT Research Group, 1995).

Coalitions as Community Change Agents for Population-Level Outcomes

One potential reason for why research does not consistently show sufficient
evidence of coalitions influencing population-level health outcomes is that most studies
and funders have unrealistic expectations of the amount and type of outcome that can be
achieved within a funding or study period (Kreuter et al., 2000; Merzel & D'Affitti,
2003; Roussos & Fawcett, 2000). Population-level outcomes may take longer than the
lifetime of the grant funding period. For example, researchers in the COMMIT study
indicated that it might require more than the four years of the initiative to change
behaviors among heavy smokers (COMMIT Research Group, 1995). Given the
complexity of ameliorating a difficult community health issue such as substance abuse,
the current approach of focusing exclusively on long-term outcomes of changes in health
status and behaviors as the primary indicator of coalition effectiveness outcomes may

mask other important outcomes resulting from coalition work (Allen et al., 2008; Roussos & Fawcett, 2000). Other more short-term and intermediate outcomes are ignored when distal outcomes are the sole measure of coalition success. Allen and colleagues suggest the need to put more attention and emphasis on the specific activities coalitions pursue to achieve their mission. Their evaluation of domestic violence councils suggests that in addition to sharing information and building relationships, these coalitions are effective at promoting community changes to increase a community's ability to respond to domestic violence, such as modifying community practices or creating new programs. Focus on community changes brought about by these entities appears to add value to understanding coalitions (Allen et al., 2008).

Coalition researchers have made some progress by focusing on changes in the community environment as intermediate outcomes toward population-level outcomes (Allen et al., 2008; Collie-Akers et al., 2007; Hays, Hays, DeVille & Mulhall, 2000; Kegler, Twiss & Look, 2000; Watson-Thompson, Fawcett, & Schultz, 2008). They suggest that focusing on more near-term and intermediate markers of success provides some benefit to coalition evaluations, improving traditional coalition evaluations that have predominantly emphasized changes in distal health outcomes. These intermediate outcomes consist of new and modified programs, policies and practices brought about by the coalition related to its mission. Changing physician practice to incorporate drug and alcohol prevention information during annual school physicals, improving lighting in areas known for drug sales and illicit behaviors, and changing policy to make party hosts responsible for incidents of underage drinking are all examples of community changes a coalition can facilitate.

Evaluation of Project Freedom, a substance abuse coalition in Wichita, KS (Fawcett et al., 1997) describes how community change relates to achievement of long-term population-level outcomes. The findings suggest that the coalition was engaged in high levels of community mobilization and was effective at facilitating new or modified programs, polices and practices targeted at their mission of preventing substance abuse. Additionally, survey data from high school seniors showed a modest impact on reducing use of alcohol. Examination of single nighttime vehicle crashes, a population level indicator of community health, also suggests a negative correlation between this variable and the number of community changes the coalition helped bring about. The researchers investigated this relationship further, and discovered that rates of single nighttime vehicle crashes were more likely to decrease when a sufficient number of community change had been achieved, suggesting that the coalition contributed to reductions in crash rates.

Reexamination of the Fighting Back initiative with the perspective that coalitions can facilitate necessary community changes that are important intermediate outcomes of success sheds light on the contributions these coalitions made that were obscured by the initial evaluation study by Hallfors and her colleagues (2002). Hingson et al. (2005) conducted a follow-up study of the Fighting Back Program, looking more carefully at a subset of the communities that devoted a significant portion of their time and effort to limiting access to alcohol and expanding treatment services. The researchers identified 5 of the 12 Fighting Back sites that brought about significant environmental and community changes targeted at reducing alcohol availability and expanding treatment. Examples of community changes included: conducting responsible beverage training; enacting ordinances to prohibit public consumption or beverage sales; closing liquor

stores/blocking new stores/monitoring problematic outlets; limiting marketing/advertising; increasing publicly funded treatment; initiating hospital emergency room screens/referrals; establishing drug courts; and opening new treatment/aftercare facilities.

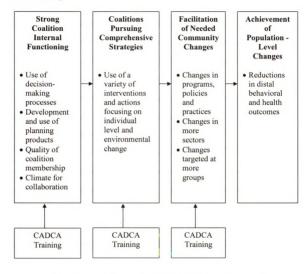
These five communities, in comparison to matched controls and the remaining Fighting Back communities, had more significant decreases in alcohol related fatal crashes the 10 years following implementation of the Fighting Back program compared to the 10 years prior, even taking into consideration the decreasing trend in fatal crashes witnessed in recent years. The Hingson et al. (2005) study indicates that effective Fighting Back coalitions were able to bring about a higher number of community changes, targeting both availability of alcohol and expanding treatment, and that these community changes were precursors to reductions in alcohol-related crashes and fatalities. What this study highlights is that coalitions vary in how effective they are, and that when they are better community problem solvers, they bring about more community changes. As such, greater focus needs to be placed on how to make coalitions better community problem solvers. This study takes this next step, examining the role training plays to increase a coalition's capacity for community problem solving.

Community Problem Solving for Substance Abuse Prevention

One promising approach to help coalitions become effective change agents is the community problem solving model used by Community Anti-Drug Coalitions of America (CADCA) and its National Coalition Institute (Institute), a coalition training and capacity building center that works with thousands of anti-drug coalition members across the country. This model for community problem solving is based on work conducted by

coalition researchers at the Work Group for Community Health and Development at the University of Kansas (KU Work Group) (Collie-Akers et al., 2007; Fawcett et al., 2001; Roussos & Fawcett, 2000). The KU Work Group created their model from the Institute of Medicine's framework for collaborative community health initiatives (Institute of Medicine, 2002). According to this model, the aim of local coalition efforts is to modify their community environments and systems, transforming targeted community sectors such as the business, health and education sectors by changing programs, policies and practices to increase the likelihood of healthier behaviors on a population-wide scale. CADCA's Institute has adapted this model for use with anti-drug coalitions on a nation-wide scale. Its interpretation of the research-based model is depicted below in Figure 2.

Figure 2. CADCA Institute's Training Impact of Framework for Effective Community Problem Solving



In this framework, coalitions are effective vehicles for community health promotion by taking a problem solving approach to addressing local needs and concerns. Researchers emphasize that coalitions need to have a strong understanding of root causes or local factors that explain the presence of substance abuse problems within the community (Florin et al., 1993). This suggests that each community is unique, and as such each community's response to their substance abuse problem will be different. This community problem solving approach is a process by which coalitions become local

experts on the unique local issues and conditions promoting substance abuse and coalitions use local solutions to address the problem (Lasker & Weiss, 2003). As depicted above, this model includes aspects of coalition inner work (i.e., internal functioning), external work (i.e., implementation of comprehensive strategies), and role as community change agents and their link as intermediate outcomes to population-level change. While population-level outcomes are the long-term targets for coalitions, this study focuses on how training improves capacity in the first three components: internal coalition functioning, comprehensiveness of strategies, and facilitation of community changes. Each of these is discussed below.

## Coalition Internal Functioning

Coalition internal functioning refers to the inner work of the coalition, such as activities and processes to create, improve and maintain the coalition (Butterfoss, 2007; Foster-Fishman et al., 2001). Coalitions vary extensively in their internal coalition functioning, and many studies have been conducted to understand the characteristics of internal functioning found in effective coalitions (Roussos & Fawcett, 2000; Watson-Thompson, Fawcett & Shultz, 2008; Zakocs & Edwards, 2006). This research suggests a well functioning coalition is more likely to achieve its goals. In the Community Problem Solving Model, coalition internal functioning is comprised of four dimensions: 1) coalition use of essential decision-making processes; 2) development and use of quality planning products; 3) active membership involvement; 4) and a climate for collaboration. The training approach targeted in this study is designed to help coalitions improve in each of these four elements.

## Coalition Use of Essential Decision-Making Processes

Fawcett and colleagues propose detailed processes to help coalitions increase their capacity to be effective community change catalysts (KU Work Group for Community Health and Development, 2007; Watson-Thompson et al., 2008). Their review of the coalition literature suggests "essential processes" that support community change and improvement. Essential processes are "modifiable factors or activities that have been shown to increase the likelihood of making an impact" (KU Work Group for Community Health and Development, 2007,

http://communityhealth.ku.edu/ctb/explore\_best\_processes.shtml). By engaging in these essential processes, coalitions are more likely to bring about changes in programs, policies and practices specific to the community health problem they are tackling (KU Work Group for Community Health and Development, 2007; Watson-Thompson et al., 2008). The Institute's community problem solving model trains coalitions in the following evidence-based essential processes:

Assessing community needs and resources. This process refers to a coalition engaging in a comprehensive assessment process to understand the needs and resources in their community (Butterfoss, 2007). This is a fundamental component of most coalition building models, such as the Framework for Participation for Community Development (Habana-Hafner, Reed & Associates, 1999 as cited in Butterfoss, 2007) and Community Coalition Model (Butterfoss, Goodman & Wandersman, 1993). Research suggests that this is one important process coalitions need to invest in. For example, evaluation of the Community Care Network indicated that the most successful partnerships engaged in efforts to gather community input on the issue of health. These

communities sought to solicit information on the needs and concerns within the community, some using focus groups, community forums and surveys (Shortell et al., 2002). This process is important because it supports coalitions in implementing the right strategies to address local concerns that fit community context (Foster-Fishman et al., 2001; Shortell et al., 2002)

Analyzing information about the problem or goal. Researchers suggest that coalitions examine and understand the nature of the problem affecting the community. For example, problem analysis was one key process used by the community partnerships in the W. K. Kellogg Foundation's Turning Point Initiative to improve local public health infrastructure (Lasker & Weiss, 2003). Some studies suggest that this may help a coalition be more targeted in their approach by clearly articulating key problems to address (Kreuter et al., 2000). This also sets the stage for selecting interventions based on local context versus implementing strategies at random (Florin et al., 1993).

Developing a framework of change. In this process, the coalition specifies how it will move from current conditions to improvements in population-level health and behaviors. This process emphasizes the development of a visual map, such as a logic model, to represent the coalition's theory of action (i.e., the outcomes the coalition is targeting and what they will do to achieve these outcomes) (KU Work Group for Community Health and Development, 2007). Julian (1997) used a logic model in his work with a United Way targeting changes in the human service delivery system. This case study indicated that the logic model improved the organization's planning and evaluation processes by making explicit the community changes the organization was targeting and the expected outcomes of such changes.

Developing and using strategic and action plans. This process helps the coalition put more detail into its theory of action, specifying what will be accomplished, by when, and by whom (Hays, Hays, DeVille, & Mulhall, 2000). The coalition selects specific strategies to address identified problems. Kreuter and colleagues (2000) suggest that poor planning that does not match strategies to outcomes is one reason coalitions never move beyond implementation of intervention to the achievement of outcomes. Proper coalition planning that delineates specific interventions to target local outcomes is one critical process for a coalition.

Identifying, adapting and implementing interventions. Often called evidence-based programs or best practices, coalitions need to implement a variety of interventions that match their particular community setting (Foster-Fishman et al., 2001). The more successful partnerships in the Community Care Network were ones that implemented strategies that complemented each other in such a way that brought the coalition closer to achieving the targeted aims of the community health initiative (Shortell et al., 2002).

Evaluating the coalition. Achieving long-term outcomes requires time and coalitions should track indicators to know if they are making progress toward their mission and to improve their work (KU Work Group for Community Health and Development, 2007; Roussos & Fawcett; 2000). Most coalitions become involved in evaluation because an external funder requires coalitions to track specified outcomes for accountability purposes. However, when a coalition takes on an evaluation out of its own curiosity about the effectiveness of their efforts and motivation to learn more and improve, the evaluation process can be more successful (Wolff, 2003).

Sustaining projects and initiatives. A coalition needs to attune to the variety of

resources (funding, staff, material and other resources) needed to maintain and sustain their coalition so that they are in existence long enough to bring about wide scale change and improvements. Roussos and Fawcett's (2000) review of the coalition literature indicates that coalition success at securing financial resources for its efforts may predict sustainability. For example, resources can be used to hire staff to help run and maintain the coalition. While this may not be the most critical factor for coalition success (Wolff, 2001), a coalition's ability to bring in human and financial resources may indicate some level of strong functioning (Roussos & Fawcett, 2000).

The presence of these essential processes appears to be an indicator of effective internal functioning. There is evidence to suggest that coalition use of these essential processes promote community changes (KU Work Group for Community Health and Development, 2007). Putting these essential processes to practice seems to be an important function of coalition work and was measured in this study as one aspect of internal coalition functioning.

Development and Use of Quality Planning Products

Another element of internal functioning is the development and use of quality planning products. There is some support in the research literature for the development of planning products to improve coalition functioning (Fawcett et al., 2001; Hays et al., 2000; Roussos & Fawcett, 2000; Watson-Thompson et al., 2008). In an empirical case study of a coalition created to decrease risk for cardiovascular disease, one key determinant of the coalition's ability to facilitate these changes was the development of planning products: a strategic plan that included vision and mission statements, a logic model and an action plan (Collie-Akers et al., 2007). The distinction between the

Essential Processes and these Planning Products is that these are tangible documents to guide the decision-making of the coalition. For example, while a coalition may decide to implement a variety of interventions, mapping them on paper and having a "reference guide" appears to be an important aid to coalition work. The Institute's training approach incorporates the development and use of planning products (Community Assessment, Logic Model, Strategic/Action Plan, Evaluation Plan and Sustainability Plan) to help coalitions engage in the essential processes in their community. This study incorporated a measure of coalition use and development of quality planning products as a measure of internal functioning critical to a coalition's community problem solving capacity.

#### Active Member Involvement

The importance of coalition member involvement is highlighted in a variety of coalition frameworks, such as the Conceptual Framework of Coalition Assessment (Sofaer, 1993 as cited in Butterfoss, 2007), Framework for Partnerships for Community Development (Habana-Hafner, Reed and Associates, 1989 as cited in Butterfoss, 2007) and the Community Coalition Action Theory (Butterfoss & Kegler, 2002 as cited in Butterfoss, 2007). Membership is important because "members are the lifeblood of a coalition-without them, there is no organization at all...members determine the vision, the course and the outcomes of effective coalitions" (pg. 138, Butterfoss, 2007). Coalitions by definition bring different stakeholders together to work in collaboration toward a mutually agreed upon goal. These stakeholders or members then do the work of the coalition, each within their realm of influence, contributing varied skills, relationships, knowledge and resources. As such, coalitions with greater diversity in their membership may also have more expertise and assets to put into play at addressing the

targeted community concern (Foster-Fishman et al., 2001; Mays, Halverson & Kaluzny, 1998 as cited in Lasker, Weiss & Miller, 2001).

Research has put attention into examining the role membership plays in coalition functioning, examining both the diversity of membership involvement (i.e., how many different groups/individuals are represented) and how actively they are involved (Allen, 2005; Allen, 2007; Hays et al., 2000). While diversity of membership is important, the degree to which these stakeholders are actively involved may be the more critical factor related to coalition member involvement. For example, greater member participation may require greater coordination of efforts in order to keep members engaged, so a key issue may be how successfully a coalition can engage members in the work of the coalition. Allen's (2005 and 2006) study of coalitions addressing domestic violence supports this premise. Her study found that active member participation was a predictor of council effectiveness (i.e., making progress on intermediate and long-term goals). This study measured breadth of active participation as a key component of coalition internal functioning.

Coalition Climate for Collaboration

Much attention has been given to the relationship between the quality and degree of collaboration within a coalition and coalition functioning (Foster-Fishman et al., 2001; Lasker, Weiss & Miller, 2001; Weiss, Anderson, & Lasker, 2002). While coalitions bring diverse stakeholders, skills, viewpoints and resources to the table, coalitions also need to create a climate that supports and promotes these diverse members in working together toward a common goal (Lasker et al., 2001).

High functioning coalitions create a climate for collaboration (Foster-Fishman et

al., 2001; Zakocs & Edwards, 2006). Foster-Fishman and colleagues (2001) conceptualized this as positive internal relationships illustrated by characteristics such as trust, cohesiveness, common vision, collective decision-making, and effective conflict resolution processes. When this internal climate exists, members may feel more comfortable taking risks together, sharing different viewpoints, transforming conflict from fighting to growth and learning, and participating more fully in the coalition effort (Butterfoss, 2007; Chavis, 2001; Lasker & Weiss, 2003). The ability of coalitions to create such a supportive climate for their work appears to be a critical element of coalition internal functioning and was included in this study as one of the four components of a well functioning coalition.

## Comprehensiveness of Strategies

Another key factor that characterizes capacity for community problem solving is a coalition's ability to engage in multi-strategy, comprehensive action. The convergence of community stakeholders is not an end in and of itself. The real work of an effective coalition is its efforts to change community norms, attitudes, behaviors, systems and environments. A single intervention is unlikely to achieve the high level of community transformation needed to improve health and well-being (Merzel & D'Affitti, 2002). Instead, ecological theory proposes that behavior, such as substance use and abuse, is influenced at multiple levels and as such interventions must be broad-based, comprehensive and seek change at multiple levels (Bronfenbrenner, 1979; Sorensen, Emmons, Hunt & Johnston, 1998). In addition to changing individual-level factors, coalitions need to engage in strategies to improve conditions in families, organizations, systems and communities. Coalitions need to take action using a wide array of

interventions at its disposal, including advocacy efforts and implementation of evidence-based interventions (Fawcett, Francisco & Schultz, 2004).

Comprehensiveness of strategies, in this study, refers to actions the coalition engages in to address substance abuse in the community (i.e., strategy implementation). It involves all the planning, meeting, coordinating, mobilizing, etc. that a coalition engages in to bring about a community change. This may be working on changing a local policy or planning with schools to implement a Student Assistance Program, a school-based program to prevent, identify, and intervene in areas of identified needs that may have a negative impact on academic achievement and youth development, including substance abuse. These are the actions coalitions take in their work toward bringing about a community change

Examination of substance abuse coalition actions suggest that the primary areas of coalition intervention are in information dissemination, such as education about the harms associated with substance use, building individual skills, such as communication and drug refusal competencies, and providing support, such as drug-free alternative activities (Florin et al., 1993; Hallfors et al., 2002). Less emphasis appears to be in interventions targeting systems change, such as increasing enforcement of underage drinking laws, prohibiting sales of drug paraphernalia, or advocating for responsible beverage server trainings in bars and restaurants. Florin and colleagues encouraged training and technical assistance providers to build coalition capacity to employ a variety of strategies, not just those focusing on individually-focused interventions, such as information dissemination.

Some effort has been made to create a typology for coalition prevention activities,

such as the one used by Florin and colleagues (1993) that categorized coalition activities into eight areas, including drug free alternative activities, information dissemination, referral and treatment, and reducing environmental support for drugs. Roussos & Fawcett (2000) suggest that change strategies can be categorized by intensity, suggesting that information dissemination activities are "weaker" than those that focus on changing access to health care or implementing new policies. These activities are weaker in the sense that they focus more on individual-level change instead of community and systems-level changes. They and their colleagues have put effort into categorizing behavior change strategies (i.e., coalition interventions) into the following areas, ranging from less intense interventions to more intense activities that are considered to be "environmental strategies" in the substance abuse prevention world (Paine-Andrews et al., 2002):

- Providing information Educational presentations, workshops or seminars, and data or media presentations (e.g., public service announcements, brochures, billboard campaigns, community meetings, town halls, forums, Web-based communication).
- Enhancing skills Workshops, seminars or activities designed to increase the skills of community members, such as youth, parents and citizens (e.g., training, parenting classes, evidence-based prevention programs for youth).
- Providing support Creating opportunities that reduce risk or enhance protection
   (e.g., providing alternative activities, mentoring, support groups, youth clubs,
   parenting groups, Alcoholics or Narcotics Anonymous).
- Enhancing access/reduce barriers Improving community and service delivery
   processes to increase the ease, ability and opportunity for community members to

- access and use the services (e.g., access to treatment, childcare, transportation, housing, education, special needs, cultural and language sensitivity).
- Changing consequences Using incentives and disincentives to alter consequences of a specific behavior (e.g., increasing public recognition for deserved behavior, individual and business rewards, taxes, citations, fines, revocations/loss of privileges).
- Changing the physical design of the environment Altering the physical structure
  of the community so that individuals are less likely to engage in substance use
  (e.g., parks, landscapes, signage, lighting, outlet density).
- Modifying/changing policies Working to create formal changes in written
  procedures, by-laws, proclamations, rules or laws with written documentation
  and/or voting procedures (e.g., public policy actions, systems change within
  government, communities and organizations).

As part of this study, coalition internal functioning included a measure of the degree to which coalitions engaged in a multitude of change strategies, with the view that greater comprehensive indicated a coalition with greater capacity for community problem solving. This built upon the existing viewpoint that coalitions need to expand beyond purely information dissemination and providing support to other strategies that focus more on systems and environmental change. This study assessed the degree to which coalitions employed different types of community-based strategies and interventions.

# Facilitation of Community Changes

The final component of the problem solving model examined in this study is the extent to which coalitions facilitated community changes, defined as new or modified

programs, policies and practices that are related to the mission and goals of the coalition (Francisco, Paine & Fawcett, 1993; Fawcett et al., 1995). These differ from the change strategies or actions described in the above section. Here, community changes are the result of the coalition actions and strategy efforts. While a coalition may work to mobilize a community to pass an ordinance, it is not considered a community change until the ordinance is officially passed. The work prior to the passing of the ordinance is considered to be strategy implementation (Francisco, Paine & Fawcett, 1993; Fawcett et al., 1995).

Examples of community changes include translation of an evidence-based prevention program to Spanish to meet the needs of a growing Hispanic population (programmatic change); working with physicians to include discussions of substance abuse with parents and youth during school check-ups (practice change); and development and implementation of local ordinance that bans the sale of alcohol during community festivals (policy change). While this may not be the distal outcome for a coalition, community changes facilitated by coalitions are an important intermediate outcome to long-term outcomes (Allen et al., 2008; Hays et al., 2000; Roussos & Fawcett, 2000)

Collie-Akers and colleagues (2007) used an empirical case study design to determine if the Kansas City-Chronic Disease coalition was able to help bring about community changes to decrease risk for cardiovascular disease and diabetes among Hispanics and African Americans. Community changes were documented and analyzed to determine if the coalition was successful at changing community systems and environments. Examples of community changes this coalition helped facilitate include a

new physical activity program and implementation of a smoke-free workplace ordinance. The researchers discovered that the coalition helped facilitate 321 community changes within a two year period of time, suggesting coalitions can be very actively engaged in facilitating community change.

However, while facilitating change is important, not all community changes lead to population-level outcomes. Hingson et al.'s (2005) follow-up study of the Fighting Back Initiative indicated that all 12 sites were able to facilitate some community changes. However, what differentiated the five Fighting Back sites with significant reductions in alcohol related crash fatalities was that they facilitated more community changes (at least 8) and they targeted both reducing alcohol availability and expanding treatment. The other seven sites facilitated fewer changes that mostly targeted treatment expansion. It is critical, then, to think about the scale and scope of the community changes that are brought about.

The research conducted by the KU Work Group provides some suggestions on how community change may trigger population-level outcomes (Paine-Andrews et al., 2002; Roussos & Fawcett, 2000; Watson-Thompson et al., 2008). The KU Workgroup has developed a monitoring system so coalitions can document the community changes brought about through their collaborative efforts (Fawcett et al., 2001; Fawcett et al., 1995). Their work with coalitions suggests that population-level changes are more likely when community changes are greater in amount (i.e., number of changes), intensity (i.e., use of more behavior change strategies that go beyond information dissemination and skills building), duration (i.e., changes are more long-term instead of "one-shot" events), and exposure (i.e., penetration across the whole community and targeted populations)

(Roussos & Fawcett, 2000). For example, Paine-Andrews and her colleagues (2002) measured the community changes that two Midwest neighborhoods helped bring about to prevent teenage pregnancy over the course of four years. They found that reductions in teen birth rates were greater in the community that produced more community changes. These changes were also more comprehensive (targeting more risk factors and program components) and distributed among more sectors (e.g., business, health and education) and target groups (e.g., youth, families, community leaders).

In summary, community change appears to be a viable measure of coalition intermediate outcomes and offers a more detailed insight into the process by which coalitions contribute to long-term population-level improvements in community health and well-being (Roussos & Fawcett, 2000). This study examined coalition facilitation of new or modified programs, practices and policies for substance abuse prevention. This study was not able to track all elements of community change used in the KU Model. However, this study did allow for the assessment of community engagement as change agents in a large study. As such, examination of the targets and sectors of change was included, with the expectation that coalitions with stronger community change capacity promoted change in more areas and with more targets. In addition, this study assessed the degree to which the community changes addressed the mission, goals and community context of the coalition.

In conclusion, this study included three key elements that define a coalition's capacity for community problem solving: coalition internal functioning, use of comprehensive strategies, and promotion of community changes. By engaging in this community problem solving model, coalitions work through aspects of internal and

external functioning that help promote their ability to be community change agents, actively engaged in facilitating new or modified programs, policies and practices. High levels of capacity in each of these elements of community problem solving increase coalition potential to reach the final step of the model – contribution of their efforts to population-level change in substance abuse outcomes.

## The Study Context

CADCA Institute training is designed to improve coalition capacity in each component of the community problem solving model described above. This large national training center provides the context for this study, and before a discussion of how well designed training can improve coalition problem solving capacity is provided, a description of the study setting is useful so that the discussion is framed within a context.

CADCA is a national organization that works to increase the capacity of coalitions to comprehensively address their local substance abuse problems. CADCA's National Coalition Institute (Institute) was created to support the development and sustainability of local anti-drug coalitions. The Institute, incepted in October of 2002, has developed a comprehensive training and technical assistance system for substance abuse coalitions using the community problem solving model described in the previous section.

Capacity for community problem solving, as defined by CADCA, includes strong internal functioning, use of comprehensive strategies and facilitation of community changes. CADCA trains continuously on each component of its community problem solving model using trainings of various lengths and topics. A description of the Institute's training content for community problem solving is provided in Table 1.

Table 1. Description of CADCA Institute Trainings to Build Coalition Capacity for Community Problem Solving

#### **COALITION INTERNAL FUNCTIONING**

#### **Essential Processes**

- Training on each of the 7 essential processes (Assessing community needs and resources, Analyzing
  information about the problem or goal, Developing a framework of change, Developing and using
  strategic and action plans, Identifying, adapting and implementing interventions, Evaluating the
  coalition, Sustaining projects and initiatives)
- Providing action steps for each process (e.g., steps to conducting a comprehensive community assessment)
- o Demonstrating how each process builds upon each other

### Planning Products

- o Providing templates for each product with core elements associated with each
- o Teaching coalitions how to develop each product and use it when they return to their communities.
- o Discussing how to use these products to guide the decision-making processes of the coalition.
- o Emphasizing that products need to be revisited periodically so that they can be updated to continually be a resource to the coalition

## Membership Involvement

- o Diffusing the work of the coalition across all members
- o Creating a plan that designates how all the coalitions members will contribute to the strategic efforts of the coalition to comprehensively address substance abuse

#### Collaborative Capacity

- o Developing consensus and shared understanding of the drug abuse problem
- o Creating and maintaining coalitions and partnerships
- o Improving coalition operations

#### **COMPREHENSIVE STRATEGIES**

- Understanding how to select and implement evidence-based, comprehensive interventions
- o Matching interventions to data on local context
- Emphasizing use of environmental strategies that target systems changes

### ACCOMPLISHING COMMUNITY/SYSTEMS CHANGES

- o Defining community change (i.e., new or modified programs, policies or practices)
- o Tracking community change
- o Matching community change to coalition mission and aim

All components of the Institute's community problem solving model are imbedded into its trainings, as seen above in Table 1. The training is also highly experiential, usually providing information in large groups and then giving coalitions time in small group sessions to practice the information covered. The Institute strongly encourages the training participants to return to their communities and teach other

coalition members the lessons learned in the training. Transfer of training, that is use of training information back within the real-life context, is very difficult to achieve (Baldwin & Ford, 1988; Rhodes, Lok, Hung, & Fang, 2008). The intent of Institute training is not only for individuals to use lessons learned back in their communities but to also disseminate the information to the rest of their coalition. In order to make sure learning goes beyond the individual, the Institute helps foster coalition-wide use of training information by providing information on how to encourage transfer. The planning products are the key ways this occurs by providing participants opportunities to learn how to develop the products and then take them back home to facilitate the product development process with their other coalition members and staff. The Institute's external evaluation suggests that training participants do share information with coalition members, indicating some level of transfer of training is occurring (Foster-Fishman, Nowell, Archer & Greenway, 2005).

Summaries of yearly Institute training figures are provided in Table 2. The Institute only considers an event as training if it lasts one day or more in length.

Table 2. Summary of Institute Trainings

Fiscal Year	# of Institute trainings conducted	# of coalitions / organizations trained
October 2004 – September 2005	16	538
October 2005 – September 2006	27	748
October 2006 - September 2007	41	887
October 2007 - September 2008	51	1079

The Institute offers coalition trainings that vary in length, topic and format level.

Most trainings are two to four days in length, covering the information described in Table

1. Examples of Institute trainings are described below in Table 3. The Institute provides training in different venues – community, state, regional and national level trainings.

Almost all Institute trainings are free to coalitions. While coalitions need to pay travel expenses to attend the training, the majority of trainings do not have a registration fee.

Some trainings, such as the National Coalition Academy (please see Table 3 for description) cover housing and food costs for the duration of the training.

Table 3. Examples of CADCA Trainings

Training Name	Description	Length of Training
Coalition Core Essentials	Basic level training intended mostly for new coalitions.  Provides foundational information on community problem solving.	1-4 Days
Advanced Issues in Coalition Building – Evaluation	Advanced level training that builds upon the core essentials class, delving more deeply into how coalitions can track community changes and analyze their contribution to population-level substance abuse reductions.	1-2 Days
Advanced Issues in Coalition Building - Sustainability	Advanced level training that builds upon the core essentials class, providing more in-depth information on how coalitions can proactively sustain their human, financial and programmatic resources.	1-2 Days
National Youth Leadership Initiative (NYLI)	Core essentials class adapted for a youth (18 years and younger) audience. Youth are trained alongside an adult counterpart on all aspects of community problem solving.	4 days
From Theory to Practice	Advanced level training in which coalitions provide a formal presentation on how they have infused community problem solving into their coalition work. Coalitions are critiqued on the quality of coalition work and clarity in "making a case" for their coalition.	1-2 Days
National Coalition Academy (NCA)	Intensive year-long training experience that blends 3 weeks of face-to-face training on community problem solving, distance learning to promote training transfer between in-person training sessions, and use of an online documentation system to track the community changes the coalitions facilitates.	1 year

Most Institute trainings offered cover most of the core elements of the framework for effective community problem solving depicted in Figure 2. Additionally, even though various trainings with various lengths, levels and topics are offered, the trainings all link back to the core elements listed in Table 1. The Institute is very consistent in ensuring its trainings link back to the basic foundation of its community problem solving framework. For example, an advanced training may provide more in-depth information on a topic, but it is grounded in the core elements of the Institute's basic community problem solving model. In this way, every Institute training can be considered a booster training, each supporting the previous training. While training may be designed in a developmental sequence, regardless of the stage, the core elements form the foundation for all Institute trainings.

The Institute has invested time and effort to evaluate the effectiveness of its training approach. Initial evaluations had a formative focus, assessing the degree to which the Institute was developing its capacity to provide training on a sufficient scale and scope and with sufficient quality to help coalitions at the nation-wide level (Foster-Fishman, White & Droege, 2007, Foster-Fishman et al., 2005). These qualitative evaluations assessed training participant satisfaction with Institute trainings and development and use of core planning products to inform decision making. The evaluations suggest that coalitions trained by the Institute improve their functioning. The most recent qualitative evaluation occurred for the time period running October 1, 2005-September 30, 2006 (Foster-Fishman et al., 2007). Of the 32 coalitions interviewed, 89% indicated that the training helped them think more comprehensively and strategically, improving decision making processes. A more recent quantitative evaluation of the

Institute's training and technical assistance supports the Institute's community problem solving model (Foster-Fishman et al., 2008). A structural equation model conducted with 391 coalitions that participated in CADCA's 2007 Annual Survey of Coalitions (a coalition survey administered by CADCA) indicated that the theory of change depicted in Figure 1 has good model fit. Institute training and technical assistance appear to trigger a process by which coalitions improve their coalition internal functioning, implement comprehensive strategies and facilitate community changes. Additional analyses also indicate that the coalitions that receive training and technical assistance from CADCA develop or revise more of the planning products and also report using them more frequently to inform their decision-making processes.

These findings are promising and provide some evidence to suggest the Institute is an effective training and support organization for substance abuse coalitions. However, while it appears that CADCA training can improve coalition community problem solving capacity, neither the Institute evaluations to date nor the existing coalition training literature provide sufficient information on how coalition outcomes may vary as a result of different amounts of training participation. Training is resource intensive in terms of time and money. Coalitions need to know how much investment they should put into training in order to get the maximum benefit. Understanding what aspects of training participation are most important to maximize the benefit of training is a question left unanswered by current research on training and was the pivotal focus of this study.

Relationship between Training and Coalition Community Problem Solving

The previous section points to a variety of areas in which coalitions need to build

their competency. There is substantial evidence to suggest that coalitions require an extensive amount of skills and knowledge in order to be effective. For example, coalitions need to foster collaboration among their stakeholders, track their outcomes, develop and implement a strategic plan, and build both internal and external capacity (Butterfoss, 2007; Foster-Fishman et al., 2001; Roussos & Fawcett, 2000; Watson-Thompson et al., 2008; Zakocs & Edwards, 2006; Zakocs & Guckenburg; 2007).

Training and technical assistance are common ways to help build this coalition capacity, and research supports the utility of training for coalitions (Butterfoss, 2004; Butterfoss et al., 2003; Florin et al., 1993; Kegler et al., 1998). Additionally, coalition training is often mandated by funders to build knowledge and skills so that coalition grantees can achieve the goals of the grant program (Department of Health and Human Services RFA No. SP-09-002; Florin et al., 1993). Other research suggests that capable coalitions understand how they can benefit from this outside support and proactively seek it out when needed (Russell, 2002 as cited in Butterfoss, 2007; Roussos & Fawcett, 2000). Training research outside of the coalition field suggests that overall, investment in training has benefits for employees and their organizations. Reports on learning investments in Fortune 500 companies by the American Society for Training & Development suggest that more successful companies invest more money and time in training their employees (Paradise, 2007; Rivera & Paradise, 2006). Additionally, there is evidence that entry-level training is associated with better job attitudes, coping ability, job performance and fewer intentions to leave the organization (Saks, 1996).

The need for coalitions to utilize training and technical assistance to develop and maintain critical skills draws parallels to the culture created in learning organizations.

The studies performed in the learning organization field emphasize the adoption of a culture that values learning and growth. Learning organizations institutionalize a deep cycle of learning that is critical for sustainable change (Senge, 1990). One part of learning is being able to do new things. This comes about through acquisition of skills and capabilities. Applying learning organization theory to coalitions suggests that coalitions can benefit from training and technical assistance that help them learn and build the skills, tools and knowledge needed to thrive and succeed in their communities (Butterfoss, 2007).

Research on coalition training indicates a beneficial effect for coalitions. Training can help coalitions more actively engage in advocacy efforts and improve communication and collaboration (Stevens and Lodl, 1999). Coalition training can not only build knowledge such as greater understanding of prevention principles but also improve coalition readiness and internal and external coalition functioning (Feinberg et al., 2002). Since not all coalitions are effective at building their skills and capacities and meeting their goals, as depicted in the Fighting Back studies (Hallfors et al., 2002; Hingson et al., 2005), training appears to be an essential ingredient to help coalitions build community problem solving capacity. This study continued existing inquiry on the effectiveness of training in building skills and competencies critical for coalition success. This was done by examining if Institute training improved a coalition's capacity for community problem solving. It was hypothesized that those coalitions trained by the Institute would have greater capacity for community problem solving than those not trained by the Institute.

**HYPOTHESIS**: Coalitions that have received training from the Institute will be stronger in each element of community problem solving capacity than coalitions not

trained by the Institute.

# Dose-Response Theory

While current coalition training research indicates that training is helpful, if not necessary for coalition outcomes, very little research has been conducted on how much training is needed to benefit the coalition, how training amount should be defined or how to model the relationship between training amount and coalition outcomes. The purpose of this study was to not only determine if coalitions improve as a result of training but also to describe the association between training quantity and coalition capacity for community problem solving. Specifically, this research proposed to examine the relationship between training amount or dosage and coalition capacity for community problem solving as measured by increased coalition internal functioning, use of comprehensive strategies, and facilitation of community changes.

To investigate this relationship, this study was the first to apply dose-response theory to the coalition training field. Dose-response theory describes "the relationship between amount of exposure to the intervention and amount of improvement in observed outcomes" (Valentine, Gottlieb, Keel, Griffith & Ruthazer, 1998, pg. 366). While other disciplines such as education (Chaput, Little & Weiss, 2004) and program implementation (Durlak & DuPre, 2008) have applied this concept to their work, dose-response theory has not been applied to training, particularly in the coalition training arena, except in the most limited sense. Understanding how training dosage relates to outcomes has both empirical and practice value. Empirically, common knowledge is increased on how to design training to support coalition capacity to achieve long-term, population-level reductions in substance abuse. The applied sector would benefit from

this research as well, using research to inform the wise use of scarce training dollars.

There is a growing body of evidence across multiple disciplines to suggest that higher amounts of an intervention received are related to better outcomes. For example, the psychotherapy literature suggests that mental health consumers improve with more treatment sessions (Hansen, Lambert, & Forman, 2002; Howard, Kopta, Krause, & Orlinsky, 1986). Prevention scientists working to reduce adolescent aggression and youth substance abuse have examined the relationship between program dosage (as measured by program attendance) and program outcomes, with overall findings suggesting a link between more exposure to the prevention program and better outcomes such as less absenteeism, decreases in school failure and reductions in aggressive behavior (August, Lee, Bloomquist, Realmuto & Hektner, 2004; Charlebois, Brengden, Vitaro, Normandeau, & Boudreau, 2004; Valentine et al., 1998).

Some researchers have also hypothesized that insufficient dose is one reason why interventions have not been shown to be effective (August et al., 2004; Charlebois et al., 2004; Rescinow et al., 2001). In intervention research, the dosage question focuses on how much of an intervention an individual received. Ignoring the role intervention dosage plays in impacting outcomes increases the likelihood of Type III error – incorrectly ruling an intervention as ineffective when the intervention was not implemented with sufficient fidelity, intensity or consistency (Dane & Schneider, 1998; Rescinow et al., 2001). Low dose may also explain why intervention outcomes are not sustained over time. Program participants may receive a sufficient dose to have some benefit but not a high enough of a dose to maintain these benefits over a period of time (August et al., 2004). Across fields, researchers are calling for more studies examining

the relationship between dose and outcomes in order to achieve and improve benefits for targeted populations (Bickman, Andrade & Lambert, 2002; Chaput et al., 2004; Nation et al., 2003). Due to the serious consequences of ignoring exposure to the intervention, researchers are now emphasizing the importance of implementing a careful process to measure participant dose (Chaput et al., 2004; Rescinow et al., 2001).

Framing coalition training using a dosage model allows the expansion of current understanding of the usefulness and appropriateness of training for coalitions. This has both scientific and practical implications. For coalition research, expansion of our understanding of the conditions under which training is most beneficial expands our knowledge of how to build coalition capacity for community problem solving to ultimately achieve population-level improvements in community health and well-being. Additionally, understanding how different types of training dosage may lead to different coalition outcomes improves coalition building and increases existing knowledge of effective training design (e.g., length and intensity of training). The availability of welldosed training with specific targeted outcomes for coalitions is essential for community change and promotion of health and well-being. In applied settings, in addition to evidence on the effectiveness of a particular training, more precise information on the optimal dosage of training needed to achieve outcomes improves coalition decisionmaking, especially around cost planning. Trainings come in various lengths, topics and frequencies. Additionally, face-to-face training is expensive and time intensive. For example, one well known coalition training model, the Communities That Care (CTC) system, lasts approximately eight days, which may be divided into multiple sessions, requiring either travel to a designated training site or paying for trainers to train onsite in training package cost at least \$25,000 not including travel and other expenses (Channing Bete, 2001). When most coalition budgets are less than \$200,000 (Foster-Fishman et al., 2008), this is a substantial, even cost-prohibitive, investment in training. Even when training is free, there may be associated travel costs, including airfare, mileage, lodging and meals. Indirect costs also exist when time away from work is calculated. Improper investments of valuable time and resources may be made in training if coalitions send too few or too many individuals to a training or attend an insufficient number of trainings to benefit the coalition. This study, for the first time, empirically examined types of dosage that are relevant to coalition training and how these dosage types relate to improvements in the three elements of community problem solving of interest.

## Defining Training Dosage

Since very little has been done in training specifically to understand and measure dosage, knowledge from other fields must be drawn upon to inform the understanding of how to conceptualize training dosage for coalitions. A review of the literature across disciplines, including psychotherapy, out-of-school time programs (OST), prevention and intervention programs, media campaigns and toxicology, offers a variety of ways to measure dose. Although many focus on the amount of an intervention received (Chaput et al., 2004; Fiester, Simpkins, & Bouffard, 2005; Valentine et al., 1998), some researchers suggest dose has two aspects – quantity and quality (Nation et al., 2003; Rescinow et al., 2001). While quantity measures some aspect of amount of exposure, quality tries to capture some aspect of the integrity or fidelity of the intervention received. Applied to coalition training, training quantity might measure how much time a coalition spends in

training and quality might measure how well the training was implemented to training guidelines. Future inquiries may investigate training dose quality; however as a first step in examining the dose-response relationship for coalition training, this study examined the quantity of training coalitions need to increase their capacity for community problem solving

The dose-response relationship for coalition training has received only a limited amount of attention from coalition researchers. CTC researchers have made an initial attempt to investigate the relationship between attendance at CTC trainings and project outcomes. The CTC model trains communities to bring key leaders together, build their understanding of prevention science and the risk and protective factors associated with youth problems, implement a survey to assess each community for its specific risk and protective factor profile, and design a plan targeted at implementing evidence-based programs to address the community's identified risk factors (Feinberg et al., 2002; Quinby et al., 2008). CTC training dosage has been assessed at both the individual level (i.e., number of trainings an individual attended) and community level (i.e., the number of participants per community per training).

Results at the individual level show very marginal relationships between individual-level training attendance and individual-level outcomes, indicating only an association with greater individual-level understanding of the CTC process (Feinberg et al., 2002). On the other hand, community-level analyses performed to assess if the number of training participants per community are related to community-level outcomes show greater linkages between training attendance and outcomes (Feinberg et al., 2002; Quinby et al., 2008). For example, higher levels of attendance are related to better

coalition capacity outcomes, such as better understanding of the CTC system, community readiness, higher attendance at board meetings and more time involved in the CTC process (Quinby et al., 2008).

These findings imply that training is linked positively to both internal and external coalition functioning (Feinberg et al., 2002; Quinby et al., 2008). Additionally, the researchers suggest that coalition training effects operate in a group-level manner and when more members are trained, this training information becomes institutionalized in the community. While individuals are the entities being trained, the CTC studies suggest that there is value in aggregating this information to create a coalition-level training dosage score. The current study continued this line of coalition training inquiry, using coalition-level training dosage measures and examining how coalition outcomes varied with coalition-level exposure to training. It should be noted that this study takes an individual-level concept of training dosage and expands its use to the organizational (i.e., coalition) level. Implications of this approach will be discussed in more detail in the subsequent section.

The CTC studies offer an initial start at conceptualizing training dosage and its relationship to coalition community problem solving capacity. However, since research in the area is sparse, other fields must be examined to understand in what additional ways training dosage can be defined. Much of the work in conceptualizing dose quantity has been done in areas that focus on individual-level change, such as out-of-school time (OST) programs, prevention programming, psychotherapy and media/marketing for health promotion (Chaput et al., 2004; Howard et al., 1986; Wray, Jupka, Ludwig-Bell, 2005). As the CTC study (Feinberg et al., 2002) indicates training attendance at the

coalition-level appears to have more relevance to achievement of coalition outcomes than individual-level attendance. Translating the existing research on training dosage from more individual-level measures to organizational or coalition-level measures is needed. This study took the first steps at applying dose measures to coalition training in a comprehensive manner.

When determining how coalition training dosage or exposure should be operationalized, some guidance is provided in existing research outside of training. Dose or exposure in the fields of OST programs, psychotherapy, intervention and prevention research and marketing have been measured in a variety of ways, including intensity of exposure (e.g., viewing health campaign ads twice a week), duration of exposure (e.g., involvement in an after-school program for three years), frequency of exposure (e.g., receipt of 16 therapy sessions), and breadth of exposure (e.g., participation in 4 out of 6 of the program activities) (Chaput et al., 2004; Howard et al., 1986). While helpful to know that dosage can be operationalized in a variety of ways, the key issue for this research study was to hone in on relevant key indicators of dosage for coalition training. For the purposes of this study, a comprehensive examination of training dose included the following indicators:

- Breadth of exposure total number of unique individuals trained per coalition
- Frequency of exposure total number of individuals attending more than one training event

Intensity of exposure – average number of individuals attending
 coalition trainings (i.e., sum of training attendance across all trainings
 divided by total number of training events attended)

In choosing the above three measures of training dose for this study, careful consideration of existing literature and the context for the study played a role. This study attempted to create a theory for coalition training dosage where there is none, and as such drew upon the lessons learned from other fields as was appropriate. Additionally, since this study occurred within the real-life context of a training Institute, the measures of dosage had to be contextually relevant and useful. Institute staff considered these three types of training dosage relevant to their work and desired more information on how variations in these dosage measures may produce different coalition outcomes. The three indicators of training breadth, frequency and intensity balance both science and practice to create a more meaningful and useful application of dose-response theory to the area of coalition building. These three types of dosage were potentially confounded by factors such as coalition size and budget, and these variables were included as covariates in this study. The three dosage types examined in this study are described below.

## Breadth of Exposure

One measure of dosage relevant for coalition training is breadth of exposure defined as the number of individuals from the coalition that have ever attended a training. This measure of training attendee participation is appropriate based on the Communities That Care (CTC) study findings (Feinberg et al., 2002; Quinby et al., 2008) that indicated that the number of individuals attending a training from each community was positively related to CTC coalition outcomes. Feinberg and colleagues summed the number of

individuals attending each of the three CTC trainings and used the total number of attendees per community as the independent variable to predict overall community understanding of prevention. The researchers also conducted analyses to understand how community-level attendance at each training predicted different training outcomes, such as community readiness, CTC efficacy and internal and external functioning. For example, greater community-level attendance at the Key Leader Training is associated with more perceived community readiness, internal and external functioning, belief that prevention works, and belief that the CTC program will sustain itself in the future. Higher attendance at the Risk/Resource Analysis training is positively related to community readiness and external influence but negatively related to sense of purpose and perceived efficacy of the CTC leadership. For the Promising Approaches Training, community-level attendance is associated with less community risk and a stronger understanding of conditions that are not contributors of youth behavior problems (Feinberg et al., 2002).

A measure of breadth of exposure to training attendance was used in this study. This was a count of the total number of unique individuals from each coalition trained by the Institute. Unlike CTC trainings which are modular in format (i.e., three different trainings covering different topics that comprise the entire CTC curriculum), most Institute trainings cover all the relevant information critical to community problem solving in one training event. As such, an overall measurement of breadth of exposure across all trainings and its relationship to elements of community problem solving capacity was examined. It should be noted that this type of coalition dosage may be confounded by coalition size since larger coalitions have more people they can send to

trainings. As such, size was included in this study as a covariate.

## Frequency of Exposure

Measures of frequency of participation have been found to be useful in other studies, such as those that have tracked exposure by counting the total number of sessions or days (or any other appropriate unit) received by intervention recipients (August et al., 2004; Liaw, Meisels, & Brooks-Gunn, 1995; Nation et al., 2003; Valentine et al., 1998). The Infant Health and Development Program (IHDP), a randomized clinical trial to test the efficacy of a program to decrease developmental delays in low birth weight, premature infants, measured participants' experience of the early intervention (Liaw et al., 1995). One of their measures tracked exposure to the intervention over the three year trial period, using two frequency indicators: total number of days the child attended the Child Development Center and total number of home visits received by the family.

Greater exposure to the program accounted for a small but significant amount of the variance in IQ scores at 36 months of age.

The psychotherapy research field also tracks dosage frequency in their efforts to understand the dose-response relationship for treatment benefits (Hansen, Lambert & Forman, 2002; Howard, Kopta, Krause, & Orlinsky, 1986). Research indicates that the more sessions a mental health consumer receives, the greater his/her improvements in mental health outcomes (Hansen, Lambert & Forman, 2002; Howard, Kopta, Krause, & Orlinsky, 1986).

In this study, a measure of training frequency at the coalition-level was tracked by counting up the number individuals from a coalition that had attended more than one CADCA training within the study period. A coalition that sends its members and staff to

additional trainings may represent a coalition that is invested in continuous learning, not just one shot learning opportunities for its staff. This may be one way to measure continuous learning, allowing the comparison of more active coalition learners (i.e., coalitions sending more members to additional training) to less active coalition learners (i.e., coalitions sending fewer members to additional trainings).

## Intensity of Exposure

Measures of intensity of exposure have typically been used as indicators of the quantity of time an individual spends in an intervention within a specified period of time, such as hours/week, days/month, weeks/year, etc. (Chaput et al., 2004; Fiester et al., 2005). Research suggests that higher intervention intensity is related to a variety of outcomes. For example, higher intensity of attendance in after school academic programs and programs to prevent aggressive behavior in children is associated with better outcomes, including decreases in aggressive behaviors and higher word comprehension scores (Anderson-Butcher, Newsome, & Ferrari, 2003; Chaput et al., 2004; Fiester et al., 2005). Intensity of exposure has also been used in media campaigns to assess changes in attitudes and behaviors of target groups. For example, VERB is a health marketing campaign to help increase physical activity among children (Huhman, Potter, Duke, Judkins, Heitzler, & Wong, 2007). Children were placed into five exposure groups based on intensity of exposure (i.e., no exposure, exposure less than once a week, exposure about once a week, exposure several times a week, and daily exposure). The findings indicate a dose-response relationship based on intensity of exposure. More exposure was linked to both stronger beliefs about the benefits of physical activity and higher selfreported physical activity levels.

Applying an intensity measure to coalition training requires a twist on the traditional ways this dosage measure has been used with individuals. While an individual's level of attendance in an after-school program or a prevention program may be tracked by hours per week or sessions per year, coalition training is more infrequent and intermittent. Training intensity may be better conceptualized by the average number of individuals attending coalition trainings. While one coalition may send a single individual to a training, another may send a group, with the expectation greater representation at the training will result in greater benefit from the training. This measure has contextual relevance. Many of the Institute trainings strongly encourage that multiple coalition members attend the training together so that they may work together to apply the training materials in small group work. Other trainings require teams of two individuals to be co-trained side-by-side. The utility of this practice was tested out in this study, determining if more individuals from a coalition attending a training provide added benefit to the coalition.

## Examining Multiple Measures of Dose

There is a small body of literature that suggests added benefit can be gained by combining different measures of dosage into one analysis to determine if certain combinations of dose better predict coalition outcomes. Reviews of the OST program literature suggest that understanding of the dose-response relationship is strengthened when multiple types of dose are examined in combination (Chaput et al., 2004; Fiester et al., 2005). Combining these measures of dosage may provide a better understanding of variability in coalition outcomes because coalitions naturally vary in how many individuals are trained within a coalition, how many trainings they attend, and the

average number of individuals that attend a training. Given this variability a more integrated approach to understanding coalition dosage is needed.

An evaluation of the After-School Corporation's After School Program (TASC) examined program duration and intensity (Welsh, Russell, Williams, Reisner, & White, 2002). The evaluators examined youth attendance by how long they had participated (0, 1 or 2 years) and how actively they had participated (i.e., highly active, active or nonactive). The evaluators assessed if duration and intensity were associated with better reading and math scores. There was no relationship between attendance and reading scores; however, highly active youth involved in the program for two years exhibited the greatest increases in math scores and school attendance. The next highest math gains were found in youth who were active for two years, followed by youth who were active for one year. No significant gains in math scores were found in youth who were nonactive participants. This suggests that dosage is a multi-element construct, and a more accurate understanding of the relationship between outcomes and dose requires a comprehensive, multi-faceted operationalization of dosage.

These findings suggest that greater richness of understanding occurs when examining various combinations of exposure related to outcomes. In fact, when only attuning to one aspect of attendance, findings may be obscured (Chaput, Little, & Weiss, 2004). There appears to be benefit in examining multiple measures in a single study to look at the effect of training more comprehensively. This study continued this line of inquiry by engaging in exploratory methods to determine how different combinations of training dosage related to different levels of coalition capacity for community problem solving.

# Calculating Coalition Training Dosage

Most dosage work has been conducted at the individual level (Chaput et al., 2004). However, in this study, dosage is conceptualized and operationalized at the coalition or organizational level by adding up individual-level participation in training and creating a coalition-level dosage score. By taking a concept used primarily at the individual-level and applying it to the group level, dosage theory is expanded beyond its original conceptualization. This assumes that training received by individuals of a coalition can be aggregated to a group level and represent accurately a coalition's combined total dosage of training received. A potential problem with this approach may be that individual-level dosage may not increase in an additive fashion when aggregated but may increase multiplicatively or exponentially. Knowing how to weight individuallevel dosage to get an accurate group-level dose is not yet possible since very little coalition training research has been conducted on even taking an additive approach to dosage. There is some suggestion from the CTC training study that adding up individuallevel involvement in training to create a group dosage score is a suitable way to examine this construct and its relationship to coalition-level training outcomes (Feinberg et al., 2002). The current study expands upon lessons learned in the CTC study and provides a starting point of building a greater understanding of training dosage at the group level.

One potential bridge between individual-level dosage theory and the coalition level of analysis may be in organizational learning theory. A key aspect of organizational learning is that the only way for the organization to learn and grow is through the individuals that make up the organization. "Organizations learn only through individuals who learn. Individual learning does not guarantee organizational learning. But without it

no organizational learning occurs (Senge, 1990, pg. 129). One of the core disciplines in organizational learning theory is that of team learning. Team learning speaks to the process of alignment of the skills, tasks, energies and focus of the individual members of an organization into a single, united direction. There is a systems perspective to this conceptualization – these individuals work in choreographed synchrony together. By learning together and across the organizational entity, the actions of the coalition can be more coordinated and more effective.

Training offers coalitions an opportunity to learn and achieve this team-level of functioning critical to a learning organization. Coalitions, like all organizations, are made up of individuals. While individuals are the units that receive training, training is designed to improve the work of the coalition – to make the coalition smarter, more effective, and turning it into a learning organization (Butterfoss, 2007). Only through the development of the skills and knowledge of individuals can the coalition increase its group IQ, work in better collaboration with each other and put tools and resources to better use. The CTC training study suggests that the more individuals trained in the coalition, the more knowledge becomes institutionalized within the coalition to help improve functioning (Feinberg et al., 2002).

The dosage types selected here offer a study into different mechanisms by which training can impact the coalition's learning culture. An examination of the number of unique individuals trained is one way to operationalize how widespread training occurs across the coalition. If a coalition has only trained a single individual, then organizational learning theory would suggest that team learning is less likely to occur, in comparison to a coalition that has sent many different members to training (Senge, 1990). Furthermore,

this may indicate that policies and practices are not supportive of training, a condition which has been included as a key dimension of a continuous learning orientation in organizations (Tannenbaum, 1997). By examining training frequency as operationalized by the number of individuals that have attended more than one training, lessons learned from training can be honed and further practiced by the organization. This is one way aspect of continuous learning, which has been found to be a key ingredient in predicting the quality of products and services provided by non-profit organizations (McHargue, 2003). Finally, training intensity, or the average number of individuals from a coalition typically being trained together, may foster the team learning that is a critical aspect of a learning organization. A study of learning in non-profit organizations indicated that organizations that encouraged collaborative learning and working were better able to achieve their missions (McHargue, 2003). It appears then that these dosage measures are potential ways to examine a coalition's investment in learning. The corresponding results of these investments were the key focus of the current study.

Additionally, all of these dosage types, when they are higher in amount, may also promote diffusion of the learning. Diffusion of innovation theory suggests that the innovation (i.e., community problem solving theory) may spread more quickly and achieve an organizational tipping point when there is greater or more effective communication about it within the members of the coalition entity (Rogers, 2003). Diffusion of the training lessons occurs when the training information is shared and more and more key opinion leaders within the coalition buy into the community problem solving framework and are engaged in community problem solving behaviors. Even though not all the key opinion leaders in a coalition may be able to attend a training,

according to this theory, if diffusion happens well, the untrained ones will benefit from the training information because the knowledge and skills are shared with them (Rogers, 2003). Higher amounts of training, whether it is in terms of the number of individuals trained, the number of additional training the individual receives or the average attendance at training, may result in better diffusion of the training lessons across the coalition because it means that information from the training is shared and used by more people, is consistently communicated across the coalition, and spreads more quickly throughout the organization. This diffusion facilitates the development of the learning culture in that greater participation in training fosters a shared understanding of the role of the coalition and opportunities to practice what has been taught in training. This grasp of the "big picture" has been associated with aspects of a strong learning environment, including policies and practices that support training (Tannenbaum, 1997).

In summary, when conceptualizing coalitions and the impact of training on their capacity for community problem solving, the most useful level of measurement appears to be at the coalition-level (Feinberg et al., 2002). Since the Institute has trained continuously on the elements of its community problem solving model since its inception, it offers a rich context in which to examine dose-response for coalition training and outcomes. Since there are no established dosage definitions for coalition training, three types of coalition dosage are compared in this study to determine their usefulness at predicting community problem solving capacity: breadth of training exposure, frequency of training exposure, and intensity of training exposure. This study contributes to the existing body of knowledge on coalition community capacity building by comparing the predictive quality of these three types of dose as they relate to aspects of coalition

capacity for community problem solving. Based on organization learning theory, this study hypothesized that coalitions with higher training frequency are more likely to see better outcomes. Learning theory suggests that those coalitions with continuous investments in learning opportunities (i.e., training) will be more successful because through training they continue to learn and grow as organizations, constantly expanding knowledge and skills (Senge, 1990).

**HYPOTHESIS**: Training frequency will be the strongest predictor of each element of community problem solving.

In addition, combining types of dosage to better understand the relationship between training attendance and elements of community problem solving capacity is examined. Exploratory analysis examined the interaction between training breadth and frequency, allowing a more comprehensive and multi-faceted examination of the dose-response relationship. Building upon learning organization theory (Senge, 1990), coalitions that spread out learning across staff and members and also seek out training on a frequent basis seem to value staff development (Hendry, 1996), an important element of a learning priority. These coalitions may have the highest levels of coalition capacity for community problem, exceeding levels predicted by a single dosage type.

**PROPOSITION:** Coalitions with both high training breadth and frequency will have the highest levels of improvement in capacity for each of the three elements of community problem solving.

Modeling the Dose-Response Relationship

The previous section clearly indicates that training participation dosage can and should be defined and measured in a variety of ways. The next critical step is to

understand why and in which ways dose matters. While studies suggest that more attendance is associated with better outcomes, there are variations in the dose-response relationship that require additional consideration. There are three models that describe how training may be associated with improved capacity for community problem solving – linear model, curvilinear model and threshold model (Chaput et al., 2004; Feinberg et al., 2002; Holcomb et al., 1999).

### Linear Model

Simply stated, the linear model suggests that outcomes increase as attendance increases and that there are no limits to the benefits of attendance – more is always better. Most of the studies in the Chaput et al. (2004) review of the literature examined the linear relationship between attendance and outcomes. Many of these studies suggest that attendance intensity is positively related to outcomes, such as better school performance, reductions in problem behaviors and emotional adjustment (Anderson-Butcher et al., 2003; Youniss, McLellan, Su & Yates, 1999)

Many program evaluators have assessed the linear relationship between program participation and program outcomes (August et al., 2004; Charlebois et al., 2004). The Early Risers' Skills for Success Program is a prevention program for youth at-risk for developing conduct problems (August et al., 2004). The researchers found a linear relationship between levels of participation (i.e., total number of hours of attendance in the program) and outcomes (i.e., teacher-rated child behaviors, school adjustment, social competence, externalizing and internalizing problems). Charlebois and colleagues (2004) examined the dose-response relationship for a longitudinal prevention program for disruptive boys. A linear relationship was discovered between program attendance and

program outcomes; indicating that the program was better for those who attended more sessions.

The CTC studies (Feinberg et al., 2002; Quinby et al., 2008) also found a linear relationship between training attendance and CTC coalition capacity and functioning.

Additional research testing the linear relationship between training dosage and coalition outcomes would be informative, especially to determine if a linear relationship describes the dose-response for other types of dosage, such as frequency and intensity of training exposure.

This linear model holds promise for coalition training, suggesting that continued investment in trainings produces ongoing benefits for the coalition and its efforts.

Organizational learning theory provides some basis for why a linear model may best describe the dose-response relationship. Organizations can increase their capacity to succeed in an ever-changing world by creating mechanisms for continuous organizational learning, or embracing an adoption of a learning organization (Snyder & Cummings, 1998). Using this perspective, organizational performance and learning are linked, and value is placed in continuous personnel development (Hendry, 1996). Senge (1990) describes an ideal type of organization that has the ability to incorporate learning into its underlying values and beliefs. Senge describes an entity called a learning organization that:

will be able to deal with the problems and opportunities of today, and invest in its capacity to embrace tomorrow, because its members are continually focused on enhancing and expanding their collective awareness and capabilities...in other words, an organization which can learn (Senge, 1990,

p. 4).

Learning never ends, it is a long-term, continuous process necessary for organizational success. Based on this framework, continued investments in learning are always beneficial. Applied to training, greater investment in training, as measured by more individuals trained (breadth of exposure), involvement in more training opportunities (frequency of exposure), and more individuals trained per training (intensity of exposure), is likely to be associated with coalitions that exhibit stronger capacity for community problem solving. This model was tested in this study, examining if the relationship between each type of dose and each element of community problem solving is linear.

#### Curvilinear Model

The curvilinear model proposes that more moderate levels of attendance result in better outcomes than higher levels of attendance (Chaput et al., 2004). In this model, low attendance and high attendance produce less favorable outcomes. Those that receive a lower dose may not receive a sufficient dose to benefit from the program. Those at a high dose are at a disadvantage because they may be too engaged in the intervention or in the training and neglecting other critical activities/responsibilities. Alternatively, there may be an increase in learning up to a point, but once a limit is met, additional training results in no additional gains.

Some studies in the out-of-school time research arena suggest a curvilinear relationship between intensity of attendance and youth outcomes; however, it may not be a perfect inverted U-shaped curve. Instead, the association between the two variables may suggest that while a moderate dose is the most advantageous, higher levels of dosage

produce better outcomes than lower dosage of attendance. This relationship is depicted in studies of intensity and academic/career aspirations, school test scores and peer relationships (Chaput et al., 2004). While youth who attended with high levels of attendance did better than those with low levels of attendance, youth who attended at moderate levels of attendance had the strongest improvements in their academic achievement and relationships with others. However, a curvilinear relationship has not been found for other types of exposure. Applied to training, this may mean that moderate levels of training dose are associated with the most favorable outcomes. However, those that receive high levels of training have better outcomes than those with low levels of training.

Another interpretation of the curvilinear model can be applied from the fields of biology, pharmacology and toxicology (Calabrese and Baldwin, 2001). In these fields, a u-shaped dose-response relationship is associated with benefits at lower doses and harmful effects at higher doses. For coalitions, this may mean that lower training dosage is beneficial to a coalition because it provides the most beneficial and cost-effective use of resources and time; while higher levels of training dosage impede coalition functioning, perhaps because coalitions are overwhelmed with the amount of information they have received. However, in order to fully capture a curvilinear dose-response relationship, extensive longitudinal data need to be collected so that the full relationship between dose and outcomes is described by the data and interpreted correctly (Calabrese and Baldwin, 2001).

A curvilinear dose-response relationship has not been rigorously tested by researchers. However, research in the adult learning field also is suggestive of a potential

nonlinear relationship between involvement in adult learning opportunities (i.e., employer-provided learning, academic courses, vocational courses, and leisure courses) and health and social variables (Feinstein & Hammond, 2004). In this study, the most favorable outcomes were associated with highest levels of participation in adult learning, except for smoking cessation and political cynicism. Involvement in more than 3 to 10 classes did not increase effects of learning on smoking cessation, and effects for political cynicism indicated no additional benefits after taking a second course. While the authors did not provide potential reasons for these findings, it does appear that the relationship between dose and outcomes may not always be linear.

Research from training transfer also suggests that the benefits of training may not always be linear when examining the successful use of training to improve employee performance in the organization (Baldwin & Ford, 1988). An individual may have gained some skills immediately as a result of training and use those skills once back in the workplace; however, skill use drops off over time perhaps because there is no support in the work environment for using new skills. Additionally, it may take some time for an individual to be able to put into place the skills they learned, so they may perform "business as usual" until over time performance improves. Applied to coalition-level training and dosage, it is possible that the benefits of additional training may not be realized if the coalition environment does not support its staff and members in the use of new skills learned in training. Additionally, training benefits may wane over time. Given the great deal of work required to function well as a coalition and engage in efforts that result in population-wide changes in targeted problems, it is important to know if the benefits of continued training dry out and potentially do more harm than good. Research

is needed to fully understand if this model applies to coalition training and provide insights into what levels of training are related to diminishing returns on investment.

### Threshold Model

The threshold model is the simplest of the three models describing the relationship between dosage and outcomes (Chaput et al., 2004). The basic tenet of this model is that a minimum level of attendance is needed for individuals to experience a positive result. This model also suggests similar results for individuals whose attendance is at or beyond the threshold (Durlak & DuPre, 2008).

The threshold model has been used in other fields to understand the dose-response relationship. Quercia and Galster's (2000) review of the literature on neighborhood change, suggests that change at this level does not unfold in a linear fashion. Instead, empirical evidence exists to support the theory that neighborhoods change when thresholds are met. For example, neighborhoods may change their racial composition from primarily Caucasian to primarily a community of color when tolerance thresholds for interracial living are met – this tipping point then shifts the rate of out-migration of Caucasians and in-migration of individuals and families of color (Schelling, 1971 as cited in Quercia & Galster, 2000).

The threshold model leads to a discussion of where and how thresholds should be set. Looking to the established literature, however, does not provide many guidelines for standardized thresholds or the process to estimate one. Quercia and Galster (2000) cautioned that though thresholds existed, there did not appear to be one universal threshold that could be applied to every neighborhood, suggesting each neighborhood would have a unique threshold for change in neighborhood racial composition. Howard

and colleagues (1986) attempted to determine a threshold for psychotherapy treatment, examining at what point a psychotherapy consumer should be included in a "treated" group. Their review of the literature found that most studies indicated that it took six to eight sessions for mental health consumers to see some positive change, so a person was considered "treated" if they met this minimum threshold. Hansen and colleague's (2002) more recent review of the literature suggests that 57.6% to 67.2% of psychotherapy consumers show improvements after approximately 13 sessions. However, they caution that most consumers never meet the minimum threshold typically needed for therapeutic benefit.

While the threshold model has relevance for coalition training in that it may require a certain minimum amount of training to change coalition process and outcomes, this was not tested in this study. Determining and detecting a nonlinear relationship, such as a threshold, requires a large range and large sample (May & Bigelow, 2005), and the dosage data available in this study do not lend themselves to assessing a threshold for training amount. This study focused on testing the dose-response relationship for the linear and curvilinear models, which was more feasible with the types of dosage data available for examination.

### Conclusion

Previous research provides the strongest evidence of a potential linear relationship between training dosage and coalition outcomes (Chaput et al., 2004; Feinberg et al., 2002). Additionally, evidence from the learning organization literature suggests that coalitions benefit from investments in continuous learning (Hendry, 1994; Senge, 1990). Coalitions that participate in more training may have infused a learning orientation into

their culture. Considering the constantly changing world of community-based prevention and shifting priorities of funders and policy makers, coalitions need to be adaptive to new situations. Learning is one way to be adaptive, and so it was hypothesized that coalitions that received more training dosage did better in each element of the capacity for community problem solving model.

**HYPOTHESIS**: A linear relationship will exist between each type of training dosage and each component of community problem solving capacity.

Coalition Age as a Moderator of Training Dosage and Coalition Outcomes

Proponents of the coalition stages of development model propose that coalitions naturally develop over time, suggesting that older coalitions may have greater capacity since they have sustained themselves and have had greater opportunities to engage in coalition work related to their goal (Butterfoss, 2007; Butterfoss, Goodman & Wandersman, 1993; Florin, Mitchell & Stevenson, 1993). The national evaluation of the Drug Free Communities Support Program (DFC) also suggests that DFC coalitions are maturing over time and that the more mature coalitions are more likely to have lower rates of 30-day use of alcohol, tobacco and marijuana in comparison to less mature coalitions (ONDCP, 2008). It is possible, then, that coalition age may moderate the relationship between training dosage and coalition capacity for community problem solving. Coalitions may take advantage of training very differently based on their age. For example, an older coalition may require less training than a younger coalition in that it has already built up capacity through time and experience. It is also possible that older coalitions may require greater amounts of training in order to break coalition "bad habits". This study included an exploratory analysis of coalition age as a potential

moderating variable that may change the relationship between the training dosage and coalition outcomes.

**PROPOSITION**: The amount of training a coalition needs to build coalition capacity for community problem solving will be related to the age of the coalition.

Additional Considerations in Dose-Response Modeling – Controlling for Covariates

Research on coalitions suggests that other factors besides training may impact coalition capacity for community problem solving, such as coalition budget, size and grant funding status. These require careful attention in any coalition study.

Coalition capacity for community problem solving may be impacted by coalition budget. While coalition budget does not appear to be the defining factor for coalition success (Wolff, 2001), coalitions do require some monetary resources to operate and maintain their coalition and its work and need to put attention into infusing financial resources into their coalition (Butterfoss, 2007; Foster-Fishman et al., 2001). As such, it is likely that coalitions with larger budgets are able to attend more trainings than coalitions with smaller budgets since they have more discretionary funds to do so or a greater number of funding sources that require training participation.

Coalition size is also likely to be a covariate, especially regarding the number of individuals trained in a coalition, with larger coalitions more able and likely to send more individuals. As such, this was an additional factor covaried out in the analyses.

Finally, Drug-Free Communities (DFC) grant funding status was another potential confound that could explain the relationship between training and outcomes. As part of the grant application, coalitions must demonstrate they have engaged in a community assessment, include a logic model/strategic plan as part of the application, and indicate

how they will evaluate their efforts (Department of Health and Human Services RFA No. SP-09-002). The Institute Evaluation findings corroborate that DFC coalitions have more planning products in place, use them more frequently, and are engaged in more of the essential processes than non-DFC coalitions (Foster-Fishman et al., 2008). This evaluation also indicated that the Institute's training and technical assistance was relevant for DFCs, triggering the same community problem solving process in DFCs and non-DFCs. However, in order to examine training dosage's unique contribution to changes in community problem solving capacity, DFC funding status was covaried out.

### Current Study

The purpose of this study was to examine the dose-response relationship between coalition training and elements of coalition capacity for community problem solving: strong internal functioning, use of comprehensive strategies, and facilitation of community change (see Figures 3-5). This study used data from CADCA's training participant database and its Annual Survey of Coalitions to examine if there were differential impacts of training based on different dosages of training. The study conducted analyses to determine if training improved coalition outcomes, which type of training dosage was most predictive of coalition outcomes, and how the relationship between dosage and outcomes should be defined.

Figure 3. Dose-Response Relationship for Training Dosage and Coalition Internal Functioning

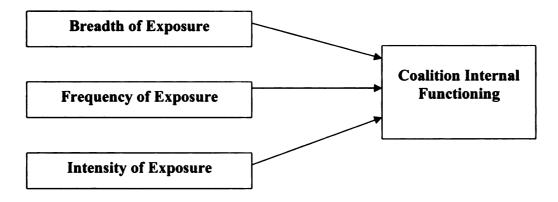


Figure 4. Dose-Response Relationship for Training Dosage and Comprehensiveness of Strategies

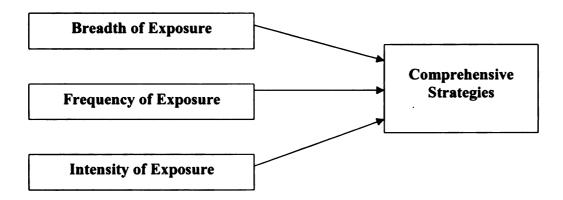
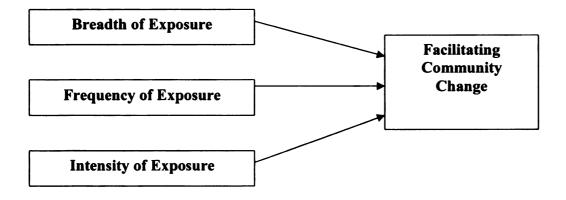


Figure 5. Dose-Response Relationship for Training Dosage and Facilitation of Community Change



The following research questions were examined:

- 1. Does training improve coalition capacity for community problem solving?
- 2. What is the nature of the relationship between training dosage and elements of capacity for community problem solving?
- 3. Which type of training dosage received (i.e., breadth, frequency or intensity) is the strongest predictor of each element of capacity for community problem solving?

Research Question #1: Does training improve coalition capacity for community problem solving?

HYPOTHESIS: Coalitions that have received training from the Institute will be stronger in each element of community problem solving capacity than coalitions not trained by the Institute.

Training appears to be a critical element to help coalitions build needed skills and capacities to successfully address local substance abuse issues (Feinberg et al., 2002; Florin et al., 1993). Training has been shown to increase knowledge and skills. Additionally, Institute trainings appear to be beneficial to coalitions in that coalitions trained by the Institute develop and use more coalition planning products (Foster-Fishman, Law & Ahn, 2008). Coalitions trained by the Institute also report becoming more effective as a result of training, making better choices regarding selecting appropriate strategies to implement, and expanding involvement (Foster-Fishman, White, & Droege, 2007). As such, it was hypothesized that coalitions that have received training from the Institute are stronger in each element of community problem solving capacity in comparison to those not trained by the Institute.

Research Question #2: What is the nature of the relationship between training dosage and elements of community problem solving capacity?

HYPOTHESIS: A linear relationship will exist between each type of training dosage and each component of community problem solving capacity.

There appears to be stronger evidence of a linear relationship between dosage and outcomes based on research in other fields (Chaput et al., 2004; Feinberg et al., 2002). Additionally, the learning organization framework proposes organizations infuse a continuous learning culture to improve organizational functioning and success (Senge, 1990). Based on this, a linear relationship between training dosage and coalition capacity for community problem solving was hypothesized, indicating that greater training exposure is associated with better coalition outcomes.

Research Question #3: Which type of training dosage (breadth, frequency or intensity) received is the strongest predictor of each element of community problem solving capacity?

HYPOTHESIS: Training frequency will be the strongest predictor of each element of community problem solving.

Three different measures of training dosage were compared in this study: training breadth (i.e., total number of individuals trained), training frequency (i.e., number of individuals that have attended more than one training) and training intensity (i.e., average coalition attendance at trainings.) It was hypothesized that training frequency would be the best predictor of coalition capacity for community problem solving. Again, drawing from the learning organization literature, coalitions that continue to seek out learning opportunities may have a strong learning orientation (Senge, 1990). The number of

individuals attending additional training is one measure of continuous learning and it was hypothesized that this dosage type would have the strongest relationship to coalition outcomes.

<u>Proposition #1</u>: Coalitions with both high training breadth and frequency will have the highest levels of improvement in each of the three elements of community problem solving capacity.

Studies suggest that the combination of different dosage types offers a more nuanced understanding of what comprises active participation in training and that outcomes may vary due to this interplay (Chaput et al., 2004). In addition to comparing the different predictive characteristics of each training dosage type, this study explored if coalitions with high levels of training for two types of dosage (breadth and frequency) have greater capacity for community problem solving.

<u>Proposition #2</u>: The amount of training a coalition needs to build coalition capacity for community problem solving will be related to the age of the coalition.

The coalition stages of development theory proposes that coalitions go through a maturation process with the most mature coalitions having the greatest capacity to address their local substance abuse issues (Florin et al., 1993). Based on this theory, coalition training may have different relevance to coalitions based on their age. This proposition was examined through exploratory analysis to determine if coalition age moderates the relationship between training dosage and coalition capacity for community problem solving.

### **CHAPTER 3: RESEARCH DESIGN AND METHODS**

#### Overview

In order to investigate the proposed hypotheses, this study used existing data collected by CADCA and its National Coalition Institute. Because training is designed to build coalition skills and capacity in each element of CADCA's community problem solving model described in the previous section, a study examining training impact needs to assess change over time. A pre test/post-test study design was used to examine how coalitions improve as a result of differing levels of coalition training exposure. Since it is possible that coalitions that seek out more training may have greater existing capacity, Time 1 scores for measures of coalition community problem solving capacity were covaried out to examine how training dosage types predict Time 2 scores. Approval for secondary data analysis was obtained from Michigan State University IRB.

### **Procedures**

### Setting

The study examined a national sample of coalitions trained by CADCA's

National Coalition Institute. This offered an appropriate context for this study for a

variety of reasons. Most coalition studies have used case studies or examined coalitions
involved in a single initiative (i.e., Fighting Back coalitions, CSAP Community

Partnerships). By using a national sample untied to any particular coalition funding
stream, there was a greater likelihood of generalizability outside of the coalitions
included in this study. In addition, this setting provided rich data on Institute training
history for each coalition and data collected for two time points on coalition capacity for

community problem solving, allowing the examination of multiple types of dosage and investigating changes in coalition outcomes over time.

### Sample

The sample consisted of 269 substance abuse coalitions that had participated in CADCA's Annual Survey of Coalitions, a comprehensive survey of coalitions. Of these, 182 had received training from CADCA while 87 coalitions served as a no-training control condition. Pre-test data were collected in 2005 for 43% (n=115) of the sample and in 2006 for the remaining 57% (n=154) of the sample. Post-test data were collected in the 2008 administration of the survey. This sample allowed comparison of those coalitions who had received training to those that had not. In addition, the sub-sample of 182 coalitions with training allowed an in-depth examination of training dosage targeted in this study.

Coalition demographic information at Time 2 is provided below in Table 4 for the dosage, untrained and total samples. The total sample was fairly evenly distributed across budget, with 38% reporting budgets of less than \$100,000, 35% with budgets ranging from \$100,000 to \$199,999, and 27% reporting budgets \$200,000 and above. Mean age of the total sample was 11.02 years (SD = 6.45). The age of the total sample also had good spread across age categories: 21% 0-5 years, 33% 6-10 years, 23% 11-15 years, and 22% 16+ years in age. There was greater representation from communities targeting counties (50%) and working in rural (54%) and suburban (29%) settings. In addition, the coalitions in the total sample considered themselves to be fairly mature, with 56% self-reporting intermediate level of maturity and 37% self-reporting being at the

advanced level. Most of the total sample (71%) currently received DFC funding, and most had 1-2 staff members (66%).

Comparisons of the dosage and untrained sub-samples do indicate differences among groups. Chi-squares were performed to determine if these coalitions varied on the covariates of budget, size and funding status. The dosage sample had larger budgets [ $\chi$ 2 (2, N=182) = 107.52, p<.001], more staff [ $\chi$ 2 (3, N=182) = 8.21, p<.05], and was more likely to have DFC funding than the untrained sample [ $\chi$ 2 (1, N=182) = 96.31, p<.001]. In terms of other demographic characteristics, the dosage and untrained sub-samples were not significantly different in age, t(250) = -.37, p = .713. Mean age for the dosage sub-sample was 11.12 years (SD = 6.34) and mean age for the untrained sub-sample was 10.80 years (SD = 6.71). The trained and untrained coalitions appeared to be similarly distributed in terms of their geographic target areas [ $\chi$ 2 (3, N=182) = 1.27, p = .74] and degree of focus on ATOD issues [ $\chi$ 2 (1, N=182) = 1.81, p = .18]. However, the two sub-samples did vary in terms of perceived maturity [ $\chi$ 2 (2, N=182) = 8.17, p<.05], with the dosage group rating themselves as more mature.

Table 4. Sample Demographic Characteristics

	Dosage Sub-sample (n=182)	Untrained Sub- sample (n=87)	Total Sample (n=269)
Characteristic	%	%	%
Budget			
Less than \$100,000	26	63	38
\$100,000 to \$199,999	42	20	35
\$200,000 and above	31	17	27
Geographic Target Area			
County	49	51	50
City	15	14	15
School District	11	9	10
Description of geographic target area			
Frontier	3	2	3
Rural	53	55	54
Suburban	29	29	29
Urban	15	14	15
Age			
0-5 years	18	27	21
6-10 years	36	27	33
11-15 years	24	23	23
16+ years	22	23	22
Self described level of maturity			
Novice	5	11	7
Intermediate	56	56	56
Advanced	39	33	37
Focus on Alcohol, Tobacco and Other Drugs (ATOD)			
Mission focused solely on Alcohol, Tobacco and Other Drug Issues (ATOD Specific)	61	56	60
ATOD issues as part of a broader mission/array of issues	39	44	41
Number of Full-Time Equivalent Staff			
None	8	16	11
Fewer than 3	58	52	66
3-5	24	22	23
More than 6	10	10	10
DFC Grant Status			
DFC Grantee	82	46	71

## Power to Detect Differences

Most coalition studies have been conducted with small samples or individual case studies (Fawcett et al., 1997; Paine-Andrews et al., 2002). The use of small sample sizes in many evaluations of community-based prevention efforts, including coalitions, has been criticized since lower statistical power exists to detect differences (Merzel & D'Affitti, 2003). In this study, power was calculated using GPower for multiple regression with 3 predictors. A sample size of 182 coalitions achieves a power of .70 to detect an effect size of .05. This effect size is between the small (r-squared = .02) and medium (r-squared = .15) effects, but coalition studies tend produce small effects (Allen, 2001; Nowell, 2005).

### Measurement Development and Data Collection

# Training Dosage

One of the biggest challenges associated with dose-response analyses is in tracking and accessing accurate records that track intervention use. Many researchers emphasize the need to implement systems to track attendance (Dane & Schneider, 1998; McCall, Ryan, & Plemons, 2003; Valentine et al., 1998). The two processes frequently used to capture this information are self-report (Anderson-Butcher et al., 2003; Basen-Engquist, O'Hara-Tompkins, Lovatto, Lewis, Parcel, & Gingiss, 1994) and assessment of attendance/service utilization records (Bickman et al., 2002; Feinberg et al., 2002; Quinby et al., 2008). Some studies have looked at recall of participants, asking them if they have utilized the program or services. However, the study of a Comprehensive Child Development Program (CCDP) compared participant recall with records in a Management Information System (MIS), and the results were very different (McCall,

Ryan, & Plemons, 2003). While the evaluators said no evidence existed to fully know which method would provide more reliable information, they suggested that the self-report method of semi-annual recall of services used in the CCDP seemed to be more problematic than weekly case manager entries into the MIS system. Regardless of the method, in order for dose-response to be assessed, dosage data must be tracked consistently.

CADCA's Institute has kept a database of all the coalitions and the individuals within the coalition that it has trained since its inception. Training attendance was collected through paper/pencil sign-in sheets at each training. Participants were required to complete the sign-in, and the information was entered into an Excel database maintained by CADCA Institute staff. The following information was collected for each training: training name, date, individual participant name, coalition name and contact information, trainer name and location of the training. Dosage for each dosage type for each coalition was calculated for the period between Time 1 and Time 2.

Coalition Capacity for Community Problem Solving

CADCA's Annual Survey of Coalitions (Annual Survey) was used to measure the dependent variables in this study: coalition internal functioning, use of comprehensive strategies, and coalition facilitation of community change. The Annual Survey measures a variety of coalition characteristics, including community sector involvement, budget, geographic target area, use of the essential processes, use of comprehensive strategies, and coalition promotion of community changes for substance abuse. CADCA's Annual Survey was created to serve as coalition census tool so that the organization could gain a better understanding of the number of anti-drug coalitions in America, demographic

characteristics of coalitions, what coalition processes they were engaged in, and what substance abuse prevention activities they were involved in. The Survey was developed by staff at CADCA's Institute who first conducted a literature review to understand qualities that defined coalition effectiveness, coalition typologies, and survey instruments commonly used in coalition evaluations.

CADCA also convened a Technical Advisory Committee (TAC) comprised of various coalition researchers to review the literature summary and to provide guidance to CADCA in the development of a coalition survey. The committee recommended key topical areas that should be included in a coalition survey. The Institute used TAC member feedback and their review of existing coalition surveys to develop the Annual Survey of Coalitions. The Survey tool was then reviewed by the TAC and also by coalition leaders. Two focus groups were convened with coalition leaders to review the Survey and provide feedback on content and flow. The focus groups were each comprised of approximately 10 coalition leaders representing coalitions of various size, age and geography. The coalition leaders also varied in how long they held a leadership position within the coalition. The final survey draft was programmed to be taken online, and the online version of the survey was reviewed by the same focus group participants and by coalitions that were members of CADCA's Coalition Advisory Committee, a governance committee comprised of coalition and state substance abuse leaders.

The Annual Survey of Coalitions was first launched in February, 2005 and coalitions were able to participate during a four month field period until June 2005. 887 coalitions participated in that survey administration. The Annual Survey was repeated in 2006 with 699 coalitions participating that year during a 4 month field period that began

in February and ended in June.

Between Fall 2006 and Spring 2007, the Institute reviewed the Annual Survey tool to determine how well it could be used to evaluate the Institute's services and supports to the coalition field. Specifically, the Institute desired to use the Annual Survey to better understand the effectiveness of its training and other supports. Since the Annual Survey's reach was nation-wide, it could be used to track a large number of coalitions over time. The Institute, in close consultation with its external evaluator, revised the Annual Survey to better serve as an evaluation tool. Toward that end, additional items were added to measure the Institute's theory of change (Figure 2), including items to measure each element of its community problem solving model. The Survey administration also moved from the beginning of the year to the end of the calendar year, to better align with the Institute's fiscal year, which runs October 1-September 30<sup>th</sup>. Many coalitions are also on the same fiscal schedule and since the Survey asks coalitions to answer questions on activities conducted in the previous 12 months, the 4-month Survey field period was now better timed to match coalition and Institute reporting calendars.

The Annual Survey is an online survey, and one survey is completed for each coalition. Instructions strongly encourage that the coalition leader be the primary respondent for the coalition since he or she is the individual most likely to have the deepest understanding of the coalition and its efforts. Annual Survey participants agree to participate by checking a box that signifies they understand how Annual Survey data will be used and shared. They are aware the information may be used for research purposes but know that individual-level identifying information will not be shared as part

of the study. A paper/pencil version of the survey is available for coalitions without internet access; however, the majority of coalitions take the survey online. For example, only 6% of respondents in 2007 completed the paper/pencil tool. CADCA also provides incentives to coalitions to participate in the Annual Survey. Coalitions that complete the survey are entered into a drawing to win prizes such as free conference and training registration, Ipods and digital cameras.

The Annual Survey has undergone revisions from the 2006 to the 2008 version, and while constructs are operationalized somewhat differently for each year, they are each measuring the same latent construct and thus does not prohibit using the Annual Surveys for pre/post comparisons. A description of each of the constructs and how they were measured each year are provided in Appendix A.

#### Measures

# Training Dosage

Training dosage was calculated for each coalition for training received between pre and post-test. Training dosage scores were calculated for any training received up to one month before the coalition participated in the 2008 Annual Survey. While a few coalitions have received training even a week prior to participating in the 2008 Survey, a month cut-off was established for inclusion in the dosage calculation, providing some time in which coalitions can implement the knowledge and skills learned in training. Training dosage was operationalized in three ways for this study and dosage scores for each coalition were calculated using data from training attendance records.

# Breadth of Exposure

Breadth of exposure was calculated by totaling the number of unique

individuals trained in each coalition. If one person attended more than one training, he or she was only counted once.

Frequency of Exposure

Frequency of exposure to training was calculated by summing the number of individuals from each coalition that had attended more than 1 training. For example, if a coalition trained 5 members, but one individual attended an additional training from CADCA, regardless of the topic, the coalition was given a score of 1.

Intensity of Exposure

Intensity of exposure was calculated by summing the number of individuals from the coalition that attend each training and then dividing this number by all the training events the coalition has attended. This measure differs from the training breadth measure in that the intent is not to know how many unique individuals were trained but rather the average number of individuals a coalition sends to trainings. For example if the summed total attendance across 3 trainings was 9 people, then the coalition had sent an average of 3 people to each training, indicating it tended to send more than one individual to Institute trainings.

Coalition Capacity for Community Problem Solving

Coalition capacity for community problem solving was measured with data collected in CADCA's Annual Survey of Coalitions. The three elements comprising capacity for community problem solving (i.e., internal functioning, comprehensiveness of

strategies and community change agent status) and how they were measured are described below.

### Coalition Internal Functioning

Four elements comprise coalition internal functioning: 1) coalition use of essential processes; 2) development and use of quality planning products; 3) active coalition membership involvement; and 4) coalition climate supportive of collaboration.

Coalition essential processes. Coalition use of essential processes was measured by subscales that assessed if a coalition has implemented activities related to the seven essential processes covered in the Institute trainings. These items were measured categorically (yes/no), with the coalition indicating whether or not they had been involved in each of the activities in each subscale. For each subscale, all the items in which the coalition indicated they were involved were totaled. Each subscale was averaged by dividing the number of active items with the total number of items in the subscale to create an individual subscale average. A description of the seven subscales and items under each are described below. The 2008 Survey subscales had more items than the 2005/2006 Survey, expanding upon items collected in the earlier Surveys. (Please see items 20, 27-29 in Appendix B; items 21, 28-30 in Appendix C; item 34 in Appendix D.

Assessing community needs and resources – In the 2005/2006 Annual Survey,
this subscale consisted of two items. The 2008 subscale had 7 items.
 Example items include: Collected data to determine or monitor the extent of
substance abuse problems in the community; Collected data on risk and
protective factor predictors for substance abuse and other related problems.

- Analyzing information about the problem or goal This subscale had one
  item in the 2005/2006 Annual Survey and four items in the 2008 Survey.
   Example item include: Used data to prioritize substance abuse needs;
   Identified local conditions (personal and environmental) that maintain risk or
  build protection in your community
- Developing a framework of change This subscale had one item in the 2005/2006 Annual Survey and four items in the 2008 Survey. Examples of items include: Developed a logic model and objectives for what the coalition will accomplish; Ensured the logic model reflects the culture and values of the community
- Developing and using strategic and action plans Three items comprised this subscale in both the 2005/2006 Annual Survey and 2008 Annual Survey.
   Sample items include: Developed a written strategic plan to reduce substance abuse in their target area; Developed population-level strategies/activities for changing community conditions and behaviors.
- Identifying, adapting and implementing interventions The 2005/2006
   subscales were comprised of two items, and the 2008 subscale was comprised of five items, such as Matched prioritized substance abuse needs with evidence-based programs/strategies; Developed local or "homegrown" programs/strategies to address prioritized substance abuse needs.
- Evaluating the coalition The 2005/2006 subscales contained seven items
   while the 2008 subscale contained 11 items: Collected data to assess
   immediate/intermediate outcomes of programs/strategies; Disseminated

program evaluation results and monitoring data to key community stakeholders.

Sustaining projects and initiatives – The 2005/2006 Annual Survey consisted
of a one-item subscale and the 2008 Survey consisted of a seven-item
subscale. Example items include: Used data as a basis for new grants or
funding proposals; Identified what must be sustained.

Development and use of quality planning products. This scale measured coalition product development/revision, product use and the quality of each product (i.e., Community Assessment, Logic Model, Strategic/Action Plan, Evaluation Plan and Sustainability Plan). Planning product questions were only measured in 2008. A total Planning Products score was created by adding up the three subscale scores (please see items 35, 36 and 38 in Appendix D):

- Product development/revision The Institute's training model emphasizes that products are not fixed and should be constantly revised and updated.
   Coalitions were asked if they had developed or revised each of the five products in the last 12 months. A subscale score is created indicating the total number of products the coalition has developed or revised in the last 12 months. Subscale scores range between 0-5.
- Product use Coalition respondents rated how often they used each of the five planning products to inform the decisions of the coalition. The five point
   Likert scale ranged from 1 = "not at all" to 5 = "always". The coalition could also indicate if they did not have the product. A total product use score

- indicating how often they used the five products was created by taking the mean of the use score across all 5 products.
- Product quality Respondents were asked to rate the degree to which each product (if the coalition has created one) was a comprehensive, effective planning tool for the coalition. The four-point Likert scale ranged from 1 = "not at all" to 4 = "a great deal". A product quality score indicating the total quality of the five products was created by averaging the quality scores across all of the 5 planning products.

Active coalition membership. Coalitions were provided a list of sectors/organizations often found represented on substance abuse coalitions. Coalitions were asked to select which groups are represented on their coalition. Then, coalitions were asked about the quality of participation, measuring how actively the organization participated on the coalition. In the 2005/2006 Annual Survey, coalitions indicated membership participation in three areas: strategy/program development, strategy/program implementation, and resources (e.g., space, funding, people, administrative, operational, programmatic supports). Active membership was operationalized as the proportion of the number of total membership that provide support in at least two out of three areas. (Please see items 2 and 3 in Appendix B and C).

In the 2008 Survey, coalitions used a four-point Likert scale ranging from 1 to 4 (1 = "not at all" to 4 = "a great deal") to rate each sector/organization's contribution to the coalition's strategic efforts. Active membership was operationalized as the proportion of sectors/organizations in the total membership with contribution ratings of 3 = "somewhat" or 4 = "a great deal." (Please see Items 2 and 3 in Appendix D).

Coalition climate supportive of collaboration. Coalition climate was measured with a five-item scale. This sub-scale was only measured in Time 2. Each item was measured on a 4 point Likert scale items ranging from 1 = "strongly disagree" to 4 = "strongly agree." Examples of items in this scale are: coalition members share a common vision for the community, the coalition has an effective conflict resolution process, and the coalition uses collaborative decision-making processes (see item 9 in Appendix D). Responses were averaged to create a coalition climate for collaboration scale score. Psychometric analysis was conducted to explore the internal consistency of this scale. The 4-item climate for collaboration scale had an alpha of .82 for the total sample (Dosage sub-sample  $\alpha$  = .82, Untrained sub-sample  $\alpha$  = .82).

Comprehensiveness of Strategies

This construct measured the implementation of the coalition's strategic plan, assessing the degree to which each coalition was engaged in a comprehensive set of behavior change strategies that are likely to bring about widespread community change.

(See item 15 in Appendix B and C and Item 39 in Appendix D)

Total strategy comprehensiveness. In the 2005/2006 Annual Survey, coalitions answered a set of dichotomous items that listed common interventions to address substance abuse. These interventions were organized into six behavior change strategies: Providing information, Enhancing skills, Providing support, Enhancing access/reduce barriers, Changing consequences, and Modifying/changing policies. Coalitions indicated if they had been involved in any of the interventions in the last year. If a coalition had been involved in any activity under one of the six strategies, then the coalition was scored a one for that category. In the 2008 Annual Survey, this scale was measured differently

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than in Time 1. An additional behavior change strategy of "Changing the physical design of the environment" was included so that 7 behavior change strategies were assessed in Time 2. Each of the seven strategies was described and coalitions indicated the extent to which they were engaged in the strategy (4-point Likert scale, ranging from "not at all" to "a great deal"). For both Time 1 and Time 2, behavior change strategies were aggregated into two types of strategy categories: program and environmental change strategies.

- Total Program Strategies The first three behavior change strategies (providing information, enhancing skills and providing support) are more individually-focused strategies used in substance abuse prevention programming. For Time 1, a total program strategy score was calculated for each coalition by counting up each program-focused strategy the coalition had been involved in, ranging from 0 to 3. For Time 2, a total program strategy score was calculated by counting the number of program-focused strategies in which the coalition indicated it was involved (not very much, somewhat, a great deal). Each coalition was given a score from 0 to 3. For both Time 1 and Time 2, a higher number indicated greater involvement in program strategies
- Total Systems Strategies The remaining behavior change strategies (enhancing access/reducing barriers, changing consequences, modifying/changing policies and changing the physical design of the environment) are considered to be more environmentally focused strategies. In Time 1, a total environmental strategy score was calculated for by counting up each environmental strategy the coalition has been involved in, ranging from 0 to 3. In Time 2, a total environmental strategy score was calculated by counting the number of environmentally-focused

strategies in which the coalition indicated it was involved (not very much, somewhat, a great deal). Each coalition was given a score from 0 to 4. For both Time 1 and Time 2, a higher score indicated greater involvement in environmentally-focused change strategies.

Average strategy involvement. Average strategy involvement scores were also calculated, broken down into program and environmental categories. In the 2005/2006 Annual Survey, as described above, coalitions indicated if they had implemented specific interventions (e.g., information dissemination campaign, community development activities, alternative activities, and enforcement of community policies/laws) associated with each of the 6 broad change strategies. For each strategy, the number of interventions implemented for each change strategy was summed. In the 2008 Annual Survey, the ratings for each of the seven behavior change strategies (0 = "not at all" to 4 = "a great deal") were used to calculate average strategy involvement.

- Average Program Strategy Involvement In Time 1, an average program strategy score was calculated by meaning the three strategies comprising this subscale (providing information, enhancing skills and providing support). In Time 2, the score was calculated by meaning the ratings across the three strategies.
- Average Environmental Strategy Involvement In time 1, an average environmental strategy score was calculated by meaning the three strategies comprising this subscale (enhancing access/reducing barriers, changing consequences and modifying/changing policies). In Time 2, the score was calculated by meaning the ratings across the four strategies (enhancing access/reducing barriers, changing consequences and modifying/changing

policies, and changing the physical design of the environment).

Facilitating Community Change

Most documentation of community changes have been done with tracking and assessing each community change facilitated by the coalition (Allen et al., 2008; Collie-Akers et al., 2007; Fawcett et al., 1997; Paine-Andrews et al., 2002). While feasible in individual case studies or studies with small samples, the Annual Survey has hundreds of participants and is not an appropriate method for gathering specific community change information for each participant. Instead, the Institute consulted with community change experts to determine how to best measure this in a large scale survey. While individual community changes could not be tracked via the Annual Survey, what could be measured wais if coalitions had helped bring about new or modified programs and policies/practices, in what sectors, for what targets, and the degree to which these changes aligned with the mission and goals of the coalition.

The Annual Survey measured if coalitions have facilitated both new or modified programmatic changes and policy/practice changes. The Institute strived to incorporate as much of the KU measurement of community change as was appropriate in a large-scale survey. Survey respondents were also asked to indicate the type of change they helped bring about (program or policy/practice), in which sectors they were able to bring about the programmatic and policy/practice changes (i.e., nonprofit, business, government/law, education/school, community, health, social services, media, family and caregiver, religious and youth), who the targets of the changes were (i.e., youth, parents and caregivers, families, community leaders, and the general community), and the extent to which these changes matched the coalition's targeted outcomes. These items were

used to measure if coalitions were engaged in change strategies in multiple sectors and for multiple targets, with more widespread change indicating that coalitions had a large circle of influence. The following aspects related to facilitation of community change were measured:

- Types of change: Coalitions were asked if they had brought about change in new/modified programs and change in new/modified policies or practices.
   For each type of change, the coalition was given a score of 0=no or 1=yes, indicating if the coalition had facilitated the type of change.
- Expanded circle of influence
  - Policy/Practice change sectors: the number of sectors in which they
     were able to bring about a policy/practice change (scores range 0-11)
  - Program change sectors: the number of sectors in which they were able to bring about a program change (scores range 0-11)
  - Policy/Practice targets of change: the number of targets of change for policy/practice change (scores range 0-5)
  - Program targets of change: the number of targets of change for programmatic change (scores range 0-5)
- Change is appropriate to local context Three items assessed the degree to
  which the community changes the coalition had helped facilitate addressed
  targeted issues and are appropriate to the local context were also measured.
   Each item was measured on a 4 point Likert scale ("not at all" to "a great
  deal"). Ratings were averaged to create a subscale score. The 3-item scale

- had an alpha of .98 for the total sample (Dosage sub-sample  $\alpha = .98$ , Untrained sub-sample  $\alpha = .99$ ). (See items 48-50 in Appendix B)
- Changes are strategic This variable was created by creating a rating of whether the changes the coalition had brought about in last 12 months were strategic. Coalitions indicated if the changes they had helped facilitate addressed targeted substance abuse problems, community risk/protective factors and local conditions that contribute to substance abuse. Coalitions were rated 0-3, with a higher number indicating more strategic changes.

## Coalition Descriptive Information

The Annual Survey also included questions pertaining to demographic characteristics of the coalition, such as its age, budget, geographic target area description, funding sources and staff and volunteer size. Time 2 scores for budget, size and funding status were covariates in this study. For funding status, a large percentage of Annual Survey respondents were coalitions with Drug Free Communities Support Program grants. As part of the application process, these coalitions needed to submit a logic model, evaluation plan and discuss the community assessment process used to gather data to justify how they will use grant funding. Since these coalitions may have had higher levels of capacity because of their grant application requirements, DFC grant status was covaried out.

#### **CHAPTER 4: RESULTS**

To conduct the analyses in this study, a pre-post database was created where 2005 and 2006 pre-test survey data were merged with 2008 post-test survey data. Dosage data were added for the subset of coalitions that had received training between Time 1 and Time 2 (n=182) and an external party removed all identifying information for the purposes of this study.

#### **Outliers**

Potential outliers and influential observations were identified by examining bubble plots that plotted the studentized residuals with leverage values. Points were scaled by Cook's D measure. Bubble plots were examined for all of the three dosage measure IVs against each of the three community problem solving DVs. In no instances were cases identified as being both unusual (i.e., outlier) and having undue influence on the model. All observations were kept in the sample.

### Univariate and Descriptive Analyses

Descriptive statistics including frequencies and measures of central tendency were used to examine the sample distribution for each variable of interest in this study.

Additionally, correlations were conducted to examine the relationships among the variables.

Measures of central tendency and other descriptive statistics on each of the three types of training dosage of interest in the study for the 182 coalitions that received training are provided in Table 5. In addition, the correlation among each of the three dosage types is provided in Table 6. The three IVs are all slightly positively skewed, and there does appear to be some range restriction in that not many coalitions are in the high

range of training exposure for any of the three dosage types. However, examination of the histograms for each of the IVs does indicate that the distributions do approach normality.

Table 5. Descriptive Statistics on Training Dosage

	Breadth of Exposure	Frequency of Exposure	Intensity of Exposure
	(Number of Individuals	(Number of individuals	(Average Number of
	Trained)	attending more than 1	Individuals Attending
		training)	Each Training)
Mean	3.96	1.17	1.93
Median	3.00	1.00	1.85
Mode	2.00	0.00	2.00
Standard Deviation	2.97	1.33	.88
Variance	8.83	1.77	.78
Minimum	1.00	0.00	1.00
Maximum	24.00	8.00	6.00

*Table 6.* Correlations between Dosage Types

	Training Breadth	Training Frequency	Training Intensity
Training Breadth	1		
Training Frequency	.61*	1	
Training Intensity	.61*	.22*	1

<sup>\*</sup> Correlation is significant at the 0.01 level.

The independent variables were highly correlated with each other (See Table 6). Multicolinearity diagnostics were performed to determine if the strong correlation between predictor variables would inflate the sampling variances for the coefficients. Multicolinearity was measured by examining the variance inflation factor (VIF), which measures how much a predictor increases the variance of the coefficients. If the predictor has a VIF > 10, then this is problematic. The VIFs for all the predictors were less than 10, indicating that the high correlation among independent variables was not problematic.

### Missing Data Imputation

A Missing Values Analysis using SPSS 17.2 was performed to determine the extent of missing data in the dataset. Sub-scales to be used in computing the principal components for all Time 1 and Time 2 measures of coalition capacity for community

problem solving and covariates were used in the Missing Values Analysis. The original pre-post dataset had 303 cases. However, missing data analysis indicated that 34 cases were missing at least 75% of data in either Time 1 or Time 2. Differences between response and non-response were examined to see if missingness varied by coalition demographic characteristics. Chi-squares were performed to determine if these 34 coalitions varied on the covariates of budget, size and funding status in comparison to coalitions will less than 75% missing data. Overall, it appears that the coalitions with missing data do not vary from the non-missing group in terms of budget, staffing or DFC Status. The 34 cases were removed from the dataset and multiple imputation was used to impute data for the remaining 269 cases. Data were imputed for 29% of the remaining sample. Of these imputed cases, most (88%) had missing data for less than 10% of the variables of interest in this study.

Table 7. Bivariate Relationships of Demographic Characteristics with Missing Data Status

	Missing			
Chi-Square Analyses	9/	Sig.		
	Coalitions with more than 75% missing data (n=34)	Coalitions with less than 75% missing data (n=269)		
Covariates	·			
Budget				
Less than \$100,000	35 (10)	38 (103)	v2 (2, 24) = 71	
\$100,000 to \$199,999	35 (10)	35 (94)	$\chi^2$ (2, 34) = .71 (p = .721)	
\$200,000 and above	31 (9)	27 (72)		
Number of Full-Time Equivalent Staff				
None	10 (3)	11 (29)		
Fewer than 3	66 (19)	56 (150)	$\chi^2$ (3, 34) = 4.03	
3-5	10 (3)	23 (63)	(p = .291)	
More than 6	14 (4)	10 (27)	•	
DFC Grantee Status			. 2 (1, 24) . 2 27	
Yes	59 (20)	71 (190)	$\chi^2(1,34) = 2.27$	
No	41 (14)	29 (79)	(p = .132)	

Little's MCAR test was used to determine if data were missing completely at random. The significant chi-square test indicates that data are not missing completely at random,  $\chi^2(1163, N=303) = 1444.29$ , p<.001. However, multiple imputation is robust against violations of MCAR and is a highly regarded approach to imputing missing data (Tabachnick & Fidell, 2007). Since the imputation process selects values for missing data at random, it preserves not only the sample size but also improves any inferences to be made of analyses using the imputed database (McKnight, McKnight, Sidani & Figueredo, 2007; Schafer & Graham, 2002). Ten imputations were selected and all analyses discussed further were conducted using the imputed dataset. Unless otherwise indicated, all results report pooled data, which averages the statistics for the original and the 10 imputed datasets.

#### Outcome Measure Scale Construction

The dependent variables were Time 2 scores on the three elements of community problem solving of interest in this study: coalition internal functioning, comprehensiveness of strategies and facilitation of community change. Since the three outcome measures and the scales used to construct them were developed for this study, to create an overall measure of each outcome variable at Time 1 and Time 2 each outcome measure (coalition internal functioning, comprehensiveness of strategies, and facilitation of community change) was constructed using principal components analysis. The first principal component, which summarizes the scales and items into one variable containing most of the variance for that latent construct, was used in each analysis. This offered a parsimonious way to create one variable combining multiple scales that are comprised of both continuous and categorical variables (Tabachnick & Fidell, 2007).

A description of how each of the principal components was extracted for each Time 1 and Time 2 measure of coalition capacity for community problem solving is described below. Also, it should be noted that while Time 1 and Time 2 are not on the same exact scale, it is a similar sort of scaling that measures the same construct. Using the principal component allows the comparison of constructs that were not measured identically in Time 1 and Time 2. Since Time 1 scores are covaried out, it allows an interpretation of Time 2 scores after controlling for initial levels of community problem solving. This is a standard way of conceptualizing pre-post designs.

Descriptive statistics for the subscales comprising each Time 1 and Time 2

Principal Component Analysis are reported in Tables B and C in Appendix A. An overall correlation matrix between the IVs and composite DVs is located in Table D in Appendix A.

# Internal Functioning

#### Time 1

To create the Internal Functioning Scale, the following variables were entered into the principal component analysis: Assessing community needs and resources, Analyzing information about the problem or goal, Developing a framework of change, Developing and using strategic and action plans, Identifying, adapting and implementing interventions, Evaluating the coalition, Sustaining projects and initiatives, and Proportion of active coalition members. Only one component with an eigen value greater than 1 was extracted. This component accounted for 40% of the variance in the dataset (see Table E in Appendix A for the total variance explained).

#### Time 2

The following variables were entered into the principal component analysis: Assessing community needs and resources, Analyzing information about the problem or goal, Developing a framework of change, Developing and using strategic and action plans, Identifying, adapting and implementing interventions, Evaluating the coalition, Sustaining projects and initiatives, Proportion of active coalition members, Total number of products developed, Average product quality, Average product use, and Quality of Collaboration. Three components with eigen values greater than 1 were extracted, accounting for 66% of the total variance in the dataset (see Table F in Appendix A for the total variance explained). The first component accounted for 47% of the total variance and appeared to be most highly correlated with the essential processes. The second component accounted for 10% of the total variance and appears to be most correlated with planning product development. The third component accounted for another 9% of the total variance and was most highly correlated with quality of membership (Table J in Appendix A for the component matrix). Examination of the scree plot indicated that the first component provided the best summary of the variables included in the analysis.

#### Comprehensiveness of Strategies

#### Time 1

The following variables were included in the principal component analysis: average involvement in programmatic change strategies, average involvement in environmental change strategies, number of programmatic strategies and number of environmental change strategies. A single component was extracted that accounted for 62% of the total variance among the variables (Table G in Appendix A).

#### Time 2

Four variables were included in the principal component analysis: Average involvement in programmatic change strategies, average involvement in environmental change strategies, number of programmatic strategies and number of environmental change strategies. As in Time 1, only 1 component with an eigen value greater than 1 was extracted, accounting for 62% of the variance (Table H in Appendix A).

### Facilitation of Community Changes

Time 1 data were not collected for this construct. A principal component analysis was conducted on the following Time 2 variables: If facilitated any new/modified program changes, if facilitated any new/modified policy/practice changes, number of sectors influenced by program changes, number of sectors influenced by policy/practice changes, number of targets influenced by program changes, and number of targets influenced by policy/practice changes. Two components were extracted, accounting for 76% of the total variance (see Table I in Appendix A for total variance explained). The first component accounted for 57% of the variance among the variables in this analysis and was mostly highly correlated with the changes fitting the mission of the coalition and being strategic. The second component accounted for approximately 20% of the total variance and was most highly correlated with whether or not the coalition had brought about a policy or practice change (see Table K in Appendix A for the component matrix). While examination of the scree plot did not show significant drop-off after the first component, the 37% difference in variance accounted for between the two components did indicate that the first component offered the most significant summary of the variables in this construct.

## Survey Year

The dosage sub-sample of 182 coalitions consisted of 54% with pre-test data collected in 2005 (n=99) and 46% with pretest data collected in 2006 (n=83). Chi-square tests were performed to determine if these sub-samples varied on key demographic variables. Results of the chi-square tests are provided in Table 8. The chi-square analyses indicate that the 2005 and 2006 sub-samples are fairly equal distributed in terms of budget, staffing, DFC status and ATOD focus. The two sub-samples do appear to vary in terms of geographic target area and self-described level of maturity, with the 2005 sub-sample more mature [ $\chi$ 2 (2, 99) = 10.15 (p < .001)] and more rural in their make-up [ $\chi$ 2 (3, 99) = 23.02 (p<.01)].

Table 8. Bivariate Relationships of Demographic Characteristics with Baseline Survey Year

	Baseline S		
Chi-Square Analyses	%	(n)	Sig.
	2005	2006	
	(n=99)	(n=83)	
Demographic Characteristics			
Budget			
Less than \$100,000	23 (23)	30 (25)	
\$100,000 to \$199,999	44 (44)	40 (33)	$\chi^2$ (2, 99) = 2.18 (p = .34)
\$200,000 and above	32 (32)	30 (25)	(p – .54)
Number of Full-Time Equivalent Staff			
None	6 (6)	11 (9)	
Fewer than 3	57 (56)	59 (49)	$\chi 2 (3, 99) = 6.09$
3-5	25 (25)	23 (19)	(p = .11)
More than 6	12 (12)	7 (6)	-
DFC Grantee Status			
Yes	81 (80)	84 (70)	$\chi 2 (1, 99) = .77$
No	19 (19)	16 (13)	(p = .41)
Focus on ATOD			
Mission focused solely on Alcohol,	62 (61)	60 (50)	
Tobacco and Other Drug Issues	` ,	, ,	
(ATOD Specific)			$\chi^2(1,99) = .11$
ATOD issues as part of a broader	38 (38)	40 (33)	(p = .74)
mission/array of issues			

Table 8	(cont'd	).
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Self described level of maturit	у				
Novice	2 (2)	9 (7)	-2 (2, 00) - 10 15		
Intermediate	53 (52)	59 (48)	$\chi^2(2,99) = 10.15$		
Advanced	45 (44)	33 (27)	*(000. = q)		
Description of geographic targ	get area				
Frontier	3 (3)	4 (3)			
Rural	61 (60)	45 (37)	$\chi 2 (3, 99) = 23.02$		
Suburban	18 (18)	41 (34)	$\chi 2 (3, 99) = 23.02$ (p = .006)**		
Urban	18 (18)	11 (9)			

<sup>\*</sup>Significant at p < .001

Further analyses were performed to determine if an additional year to implement the training lessons for the 2005 subsample made a difference in how these coalitions took advantage of training. A binary variable indicating which group the coalition is in (Time 1 = 2005 Survey / Time 1 = 2006 Survey) was added to test if this variable interacted with dosage, indicating that dosage had different effects based on how long the coalition had to implement the training lessons. Hierarchical multiple regression was used to test if cohort status had a main effect and interaction effect with training dosage on Time 2 outcome variables.

Only coalitions with training dosage were used in this analysis (n=182). Cohort status was dummy coded with the 2005 group serving as the reference group. The categorical covariates of coalition budget, size and DFC funding status were dummy coded. Coalition budget categories were collapsed into three categories. Budget categories for \$100,000-\$199,999 and over \$200,000 were entered into the model, and the less than \$100,000 category was excluded as the reference group. Coalition size was also dummy coded so that variables representing 1-2 staff, 3-5 staff, and 6 or more staff were entered into the model while the no staff category was excluded as the reference group. For DFC funding status, the funded group was entered into the model.

<sup>\*\*</sup>Significant at p < .01

The variables were entered into the model in blocks, with Time 1 community problem solving scores and covariates in block 1, training dosage and dummy coded 2006 survey year in block 2 and the interaction of the training dosage variable and survey year. Nine separate regressions were performed, examining each of the 3 dosage types' relationship to each of the 3 outcome variables.

In none of the analyses did cohort status have a main effect on the post-test outcome variable. However, in one, this variable did have a significant interaction with dosage. The interaction between survey cohort and training frequency (number of individuals attending more than one training) significantly predicted Coalition Internal Functioning, ( $\beta$ = .24, t (171) = 2.45, p<.05). The multiple R for the regression model with covariates was significant, predicting 6% of the total variance in Coalition Internal Functioning, (F (7, 174) =5.35, p<.001).  $R^2$  Change with the addition of the training frequency and survey cohort year in the second model was not significant. However, the third model with the interaction between survey cohort and training frequency did increase the variance accounted for, ( $R^2$ =.03, p<.05) (F (10, 171) = 4.83, p<.001).

Figure 6. Training Frequency by Survey Year

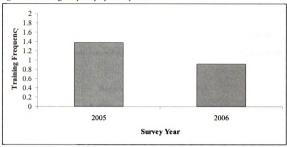
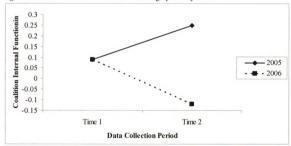


Figure 7. Time 2 Coalition Internal Functioning by Survey Year



Examination of graphs (Figures 6 and 7) indicated that the 2005 sub-sample had higher levels of training frequency and higher levels of Time 2 coalition internal functioning than the 2006 sub-sample. These findings indicate that in comparison to the 2005 sub-sample, the 2006 sub-sample experienced a decrease in the rate of change in Internal functioning for every unit decrease in the number of individuals attending additional training. In this case, it appears that the 2005 sub-sample was able to send

more individuals to additional training and also experienced better outcomes in coalition internal functioning. Since an interaction existed between training frequency and survey year when predicting Coalition Internal Functioning, survey year was included as an additional covariate in analyses when training frequency and Internal Functioning were examined.

### Improving Statistical Power

Given the large number of predictors and covariates, this study is underpowered to detect differences due to the intervention. As such, before final statistical analyses were conducted to test each hypothesis, linear regressions were performed to examine the relationship between each of the covariates (staffing, budget and DFC status) and each separate dependent variable to determine covariates not playing a significant role in the overall model. Regressions were run with the full sample and also the dosage subsample. Tables 9-11 provide the results for each of the regression analyses. The findings are discussed below.

## Coalition Internal Functioning

Multiple R for both the full sample and dosage sample regression models predicting Time 2 Coalition Internal Functioning using only the covariates was statistically significant (F (7, 261)=7.66, p<.001) and (F (7, 174)=5.35, p<.001) respectively (Table 9). For both regressions, there were main effects for Time 1 Internal Functioning and coalition staffing size. Higher Time 1 Internal Functioning and more staffing was associated with higher levels of Time 2 Coalition Internal Functioning. In the remainder of analyses, DFC status and budget were excluded since they did not significantly predict Time 2 Coalition Internal Functioning.

Table 9. Covariates Predicting Time 2 Coalition Internal Functioning

	Full Sample (n=267)				Dosage Sample (n=182)			
	<u>B</u>	SE B	β	p	<u>B</u>	SE B	β	p
(Constant)	549	.183		.003	758	.230		.001
Time 1 Internal Functioning	.267	.060	0.24***	.000	.199	.067	0.19**	.003
Have DFC Grant vs. no Grant	.267	.137	0.11	.052	.113	.160	0.05	.482
Budget \$100,000- \$199,999 vs. Less than \$100,000	.182	.145	0.08	.208	.257	.152	0.14	.091
Budget \$200,000 and above vs. Less than \$100,000	034	.155	-0.01	.829	014	.167	-0.01	.934
1-2 staff vs. no staff	.266	.192	0.12	.165	.658	.222	0.35**	.003
3-5 staff vs. no staff	.456	.224	0.18*	.042	.879	.251	0.40***	.000
6 or more staff vs. no staff	.610	.259	0.17*	.019	.975	.287	0.31**	.001
$R^2$	0.17***				0.18***			

<sup>\*</sup> P < .05; \*\* P < .01; \*\*\*P < .001

#### Comprehensiveness of Strategies

Multiple R for both the full sample and dosage sample regression models predicting Time 2 Comprehensiveness of Strategies using only the covariates was statistically significant, (F(7, 261)=6.93, p<.001) and (F(7, 174)=5.69, p<.001) respectively (Table 10). For the full sample, there were main effects for Time 1 Comprehensiveness of Strategies, DFC status and budget. Higher Time 2 Comprehensiveness of Strategies was associated with higher Time 1 Comprehensiveness of Strategies, having DFC funding and having budgets greater than \$99,999. For the dosage sample, there were main effects for Time 1 Comprehensiveness of Strategies and DFC status. Here, higher scores in Time 1 Comprehensiveness of Strategies and receiving a DFC grant were associated with higher scores in Time 2 scores in the DV.

The nonsignificant covariate of staffing was removed from the remainder of analyses using the full sample, and budget and staffing were not included in analyses with the dosage sample.

Table 10. Covariates Predicting Time 2 Comprehensiveness of Strategies

			ample		Dosage Sample			
	.=.		267)					
	В	SE B	β	р	В	SE B	β	р
(Constant)	465	.186		.012	637	.238		.007
Time 1								
Comprehensive Strategies	.223	.060	0.20***	.000	.221	.063	0.23***	.000
Have DFC Grant vs. no Grant	.324	.142	0.13*	.022	.527	.166	0.21**	.001
Budget \$100,000- \$199,999 vs. Less than \$100,000	.453	.148	0.20**	.002	.239	.155	0.12	.122
Budget \$200,000 and above vs. Less than \$100,000	.359	.158	0.14*	.023	.106	.169	0.05	.529
1-2 staff vs. no staff	045	.195	-0.02	.817	.103	.228	0.05	.651
3-5 staff vs. no staff	.005	.226	0.00	.982	.242	.257	0.11	.346
6 or more staff vs. no staff	.159	.266	0.04	.551	.469	.294	0.15	.111
$R^2$	0.16***				0.19***			

\* P < .05; \*\* P < .01; \*\*\*P < .001

# Facilitation of Community Change

Multiple R for both the full sample and dosage sample regression models predicting Time 2 Comprehensiveness of Strategies using only the covariates was statistically significant (F(7, 261)=3.79, p<.01) and (F(7, 174)=3.50, p<.05) respectively (Table 11). For the full sample, there were main effects for budget and staffing, and for the dosage sample, only staffing had a main effect. In the full sample, having a budget ranging from \$100,000-\$199,999 and having staff were associated with higher Time 2

Facilitation of Change. In the dosage sample, higher Time 2 Facilitation of Change was associated with having coalition staff. DFC status was not included in further analyses using the full sample, and DFC status and coalition budget were removed from analyses using the dosage sample.

Table 11. Covariates Predicting Time 2 Facilitation of Change

		Full Sample				Dosage Sample			
		(n=2			(n=182)				
	В	SE B	β	p	В	SE B	β	p	
(Constant)	640	.193		.001	693	.272		.011	
Have DFC Grant vs. no Grant	035	.148	-0.02	.814	.006	.192	0.00	.976	
Budget \$100,000- \$199,999 vs. Less than \$100,000	.329	.156	0.15*	.034	.292	.180	0.15	.104	
Budget \$200,000 and above vs. Less than \$100,000	.212	.167	0.09	.203	.233	.197	0.11	.236	
1-2 staff vs. no staff	.467	.205	0.23*	.023	.542	.264	0.28*	.040	
3-5 staff vs. no staff	.805	.237	0.34**	.001	.841	.298	0.38**	.005	
6 or more staff vs. no staff	.631	.274	0.19*	.021	.752	.340	0.23*	.027	
$R^2$	0.08**				0.08*				

<sup>\*</sup> P < .05; \*\* P < .01

## Results of Hypothesis Testing

Research Question 1: Does training improve a coalition's community problem solving capacity?

T-test analyses were first conducted to determine if there were significant differences between the trained and untrained groups at Time 1. This was done to determine if coalitions with higher levels of community problem solving capacity sought out training. There were no differences between the trained and untrained groups in Time 1 Scores for any of the pre-test community problem solving scores, indicating that

these groups had similar scores at baseline (see Table 12).

Table 12. Bivariate Relationships of Training Status with Time 1 Elements of

Community Problem Solving Capacity

Mean Comparisons	Training M (	=	Sig.		
	Untrained (n=87)	Trained (n=182)	-		
Coalition Internal Functioning	06 (1.12)	.16 (.91)	t = -1.71 (df = 267, p = .087)		
Comprehensiveness of Strategies	.02 (1.00)	.06 (.98)	t =29 (df = 267, p = .775)		

Hierarchical multiple regression analyses were used to examine if training status predicted the DVs once Time 1 scores and covariates were controlled for. Coalitions were divided into two groups: trained (n = 182) vs. not trained (n = 87) and training status was used to predict each of the three dependent variables (coalition internal functioning, comprehensiveness of strategies and facilitation of community change) in this study. The categorical independent variable was dummy coded before it was entered into the analysis, with the non-trained category used as the reference group, and three separate regressions were run, one for each dependent variable.

For the covariates, only the statistically significant variables were included in the regressions for each DV. Coalition staffing, budget and DFC status were dummy coded before they were put into the model. Coalition budget categories were collapsed into three categories. Budget categories for \$100,000-\$199,999 and \$200,000 were entered into the model, and the less than \$100,000 category was excluded as the reference group. Coalition size was also dummy coded so that variables representing 1-2 staff, 3-5 staff, and 6 or more staff were entered into the model while the no staff category was excluded as the reference group. For DFC funding status, the funded group was entered into the model. The variables were entered into the model in blocks, with Time 1 community

problem solving scores and significant covariates in block 1 and the training status variable in block 2.

Coalition Internal Functioning.

Multiple R for the regression model predicting Time 2 internal coalition functioning using only the covariates was statistically significant (F (4, 264) = 10.87, p<.001). The model predicted 14% of the variance in Time 2 coalition internal functioning. Adding the training status variable significantly increased the amount of variance explained (16%) in Time 2 Coalition Internal Functioning ( $R^2$  Change=.02, p<.05) (F (5, 263) = 10.06, p<.001). In comparison to coalitions that did not have training, coalitions receiving training experienced higher Time 2 Coalition Internal Functioning after covarying out Time 1 Coalition Internal Functioning and staff size.

Table 13. Training Status Predicting Coalition Internal Functioning

		Mode	el 1			Model 2			
Variable	В	SE B	β	p	В	SE B	β	р	
(Constant)	37	.18		.027	55	.19		.003	
Time 1 Internal Functioning	.29	.06	0.28***	.000	.27	.06	0.27***	.000	
1-2 staff vs. no staff	.35	.19	0.18	.063	.31	.19	0.15	.106	
3-5 staff vs. no staff	.57	.21	0.24**	.008	.53	.21	0.22*	.014	
6 or more staff vs. no staff	.66	.25	0.20**	.009	.63	.25	0.19*	.013	
Received Training		-			.30	.12	0.14*	.014	
$R^2$	0.14				0.16				
F for change in $R^2$	10.88***			.000	5.98*			0.015	

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

## Comprehensiveness of Strategies

Multiple R for the regression model predicting Time 2 comprehensiveness of coalitions strategies using only the covariates was statistically significant (F (4, 264) = 11.95, p<.001), predicting 15% of the variance. Training status did not significantly increase the amount of variance accounted for in Comprehensiveness of Strategies, indicating that training was not associated with Time 2 comprehensiveness of strategies (see Table 14).

Table 14. Training Status Predicting Comprehensiveness of Strategies

		Mode	el 1			Mod	del 2	
Variable	В	SE B	β	р	В	SE B	β	p
(Constant)	48	.12		.000	48	.12		.000
Time 1								
Comprehensive	.23	.06	0.23***	.000	.23	.06	0.22***	.000
Strategies								
Have DFC Grant vs. no Grant	.33	.14	0.15*	.017	.34	.14	0.15*	.020
Budget \$100,000- \$199,999 vs. Less than \$100,000	.44	.15	0.21**	.003	.44	.15	0.21**	.003
Budget \$200,000 and above vs. Less than \$100,000	.38	.15	0.17*	.012	.38	.16	0.17*	.014
Received Training					01	.14	-0.01	.917
$R^2$	0.15				0.15			
F for change in R <sup>2</sup>	11.95***			.000	0.01			0.918

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

### Facilitation of Community Changes

Multiple R for the regression model predicting Time 2 facilitation of community change using only the covariates was statistically significant (F (5, 263) = 4.55 p < .01), predicting 8% of the variance. Training status did not significantly increase the  $R^2$  and was not statistically significant in the prediction of Facilitation of Community Changes

(see Table 15).

Table 15. Training Status Predicting Facilitation of Community Change

		N	Model 1		Model 2				
Variable	В	SE B	β	p	В	SE B	β	р	
(Constant)	65	.19	-	.001	70	.20		.000	
Budget \$100,000- \$199,999 vs. Less than \$100,000	.32	.14	0.15*	.028	.27	.15	0.13	.072	
Budget \$200,000 and above vs. Less than \$100,000	.20	.16	0.09	.210	.16	.17	0.07	.336	
1-2 staff vs. no staff	.46	.20	0.23*	.023	.45	.20	0.22*	.027	
3-5 staff vs. no staff	.80	.23	0.33**	.001	.79	.23	0.33**	.001	
6 or more staff vs. no staff	.62	.27	0.18*	.022	.62	.27	0.18*	.023	
Received Training					.12	.14	0.06	.382	
$R^2$	.08				.08				
F for change in R <sup>2</sup>	4.55***			0.001	0.76			0.383	

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

### **Post-hoc Analyses**

Post-hoc analyses were conducted to examine the differences between the trained and untrained groups in Coalition Internal Functioning. The trained group had a mean Time 2 score of .16 (SD = .86) and the untrained group's mean was -.22 (SD = 1.20). Independent t-tests comparing the trained and untrained groups at Time 2 indicated that the trained group had statistically significantly higher scores in Coalition Internal Functioning, t(267) = -3.02, p = .003.

Paired t-tests were used to examine if pre and post test scores for the trained and untrained groups on Coalition Internal Functioning were significantly different. The results indicate that the trained group's Coalition Internal Functioning scores were stable

from Time 1 to Time 2, t(181) = .03, p = .976. The untrained group did experience decreases in their pre and post test scores for Coalition Internal Functioning but these decreases were nonsignificant, t(86) = 1.19, p = .235. The pattern of response for both groups is depicted in Figure 8.

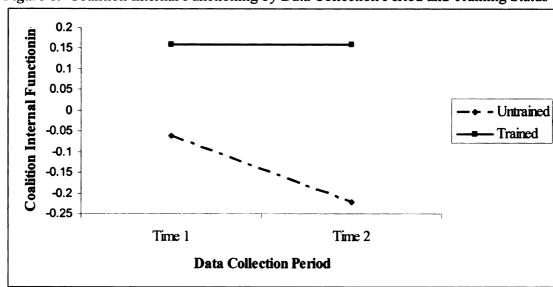


Figure 8. Coalition Internal Functioning by Data Collection Period and Training Status

Research Question 2: What is the nature of the relationship between training dosage and elements of capacity for community problem solving?

To determine the nature of the relationship between each training dosage type and each element of capacity for community problem solving, nine scatterplots were graphed, examining each independent variable's relationship to each Time 2 measure of the three dependent variables. Linear, quadratic and cubic lines of best fit were drawn but none of these were significant (Tables 16-18).

A visual inspection of the scatterplots was conducted. Lowess smoothing was used to determine a line of best fit and examination of each of the 9 scatterplots suggested that a linear relationship best describes the relationship between training dosage and

community problem solving capacity. The lowess smoothing line also best approximated the linear line of best fit that was generated, providing a better graphical representation of the data than the quadratic and cubic lines of best fit. The graphs of all the scatterplots can be found in Appendix A, Figures A-I.

Table 16. Coalition Internal Functioning and Training Dosage: Curve Fit Model Summary and Parameter Estimates

	,	Mod	lel Sumi	mary		]	Parameter	Estimates	
	R								
Equation	Square	F	dfl	df2	Sig.	Constant	bl	b2	<b>b</b> 3
		Tı	raining I	Breadth (#	of Individ	uals Trained)			
Linear	0.00	0.21	1	180	0.650	0.12	0.01		
Quadratic	0.00	0.33	2	179	0.719	0.18	-0.02	0.00	
Cubic	0.01	0.37	3	178	0.778	0.08	0.05	-0.01	0.00
	Trainir	ig Frequer	icy (# of	f Individu	als Attendir	ng More than	One Train	ing)	
Linear	0.02	3.57	1	180	0.060	0.05	0.09		
Quadratic	0.02	2.05	2	179	0.132	0.02	0.15	-0.01	
Cubic	0.03	1.62	3	178	0.186	-0.01	0.29	-0.08	0.01
		Trainir	ng Intens	sity (Aver	age Attenda	ance at Traini	ings)		
Linear	0.00	0.10	1	180	0.750	0.20	-0.02		
Quadratic	0.00	0.28	2	179	0.760	0.39	-0.20	0.03	
Cubic	0.01	0.47	3	178	0.701	-0.12	0.51	-0.25	0.03

*Table 17.* Comprehensiveness of Strategies and Training Dosage: Curve Fit Model Summary and Parameter Estimates

		Model	Summ	ary		I	Parameter I	Estimates	
	R				<del></del>				
Equation	Square	F	dfl	df2	Sig.	Constant	bl	b2	b3
		Tra	ining B	readth (	# of Indiv	iduals Trained	)		
Linear	0.00	0.54	1	180	0.465	0.04	0.02		
Quadratic	0.01	0.59	2	179	0.553	0.12	-0.02	0.00	
Cubic	0.01	0.41	3	178	0.744	0.16	-0.04	0.01	-0.00
	Training	g Frequenc	y (# of	Individ	uals Attend	ding More than	n One Trair	ning)	
Linear	0.01	1.17	1	180	0.281	0.04	0.05		
Quadratic	0.01	0.61	2	179	0.547	0.05	0.03	0.00	
Cubic	0.01	0.49	3	178	0.688	0.04	0.12	-0.04	0.00
		Training	g Intens	ity (Ave	rage Atter	idance at Trair	ings)		
Linear	0.00	0.47	1	180	0.493	0.01	0.05		
Quadratic	0.00	0.24	2	179	0.784	0.05	0.02	0.01	
Cubic	0.01	0.71	3	178	0.547	-0.68	1.01	-0.40	0.04

Table 18. Facilitation of Change and Training Dosage: Curve Fit Model Summary and Parameter Estimates

		Mod	lel Sumi	mary		]	Parameter	Estimates	
	R								
Equation	Square	F	dfl	df2	Sig.	Constant	bl	b2	b3
		Tı	raining l	Breadth (#	of Individ	uals Trained)			
Linear	0.00	0.08	1	180	0.777	0.12	-0.01		
Quadratic	0.01	0.69	2	179	0.500	-0.00	0.05	-0.00	
Cubic	0.02	1.02	3	178	0.383	0.23	-0.10	0.02	-0.00
	Trainir	ig Frequer	icy (# o:	f Individua	als Attendii	ng More than	One Train	ing)	
Linear	0.00	0.14	1	180	0.710	0.12	-0.02		
Quadratic	0.02	1.87	2	179	0.157	0.03	0.17	-0.04	
Cubic	0.02	1.24	3	178	0.296	0.03	0.15	-0.03	-0.00
		Trainir	ng Inten	sity (Aver	age Attend	ance at Traini	ings)		
Linear	0.00	0.00	1	180	0.968	0.09	0.00		
Quadratic	0.00	0.00	2	179	0.998	0.07	0.02	-0.00	
Cubic	0.01	0.39	3	178	0.762	-0.59	0.94	-0.37	0.04

Research Question 3: Which type of dosage is the strongest predictor of each element of capacity for community problem solving?

Correlations between each dosage type and outcome measures were first examined to determine if the variables were related to each other. None of the dosage measures were significantly correlated with any of the DVs. The correlation matrix between the IVs and DVs is depicted in Table 19.

Table 19. Correlation Matrix of IVs and DVs (Dosage Sub-Sample)

		1	2	3	4	5	6	7	8
1.	Training Breadth								
2.	Training Frequency	.61*							
3.	Training Intensity	.61*	.22*						
ŀ.	Coalition Internal Functioning Time 1	.08	.06	.10					
	Comprehensiveness of Strategies Time 1	.03	.01	02	.22*				
j.	Coalition Internal Functioning Time 2	.03	.14	03	.28*	.18**			
7.	Comprehensiveness of Strategies Time 2	.06	.08	.05	.24*	.29*	.54*		
3.	Facilitation of Community Change Time 2	02	03	.00	.18**	.15**	.44*	.47*	

Note: \* P < .01; \*\* P < .05.

Hierarchical multiple regression analyses were used to determine which type of dosage (breadth, frequency or intensity) was the best predictor of each element of capacity for community problem solving. The sub-sample of 182 coalitions with training dosage was used for these analyses. Three separate regressions were conducted for each of the three dependent variables. As in Research Question 1, only the significant covariates were included in the analyses (See Tables 9-11). The variables were entered

into the model in blocks, with each Time 1 community problem solving score and the covariates in block 1 and the three training dosage variables in block 2.

While the Multiple R for the regression models predicting each of the three elements of community problem solving using only the covariates were statistically significant, addition of the dosage variables into the models did not significantly increase the variance explained.  $R^2$  did not significantly increase with the addition of the dosage variables in block 2 for any of the analyses. Examination of the coefficients indicated that training frequency did predict Coalition Internal Functioning ( $\beta$ = .18, t(264) = 2.06, p<.05); however, since the  $R^2$  change for this analysis was nonsignificant, training frequency does not account for a significant portion of the variance in post-test Coalition Internal Functioning. All of the other analyses were nonsignificant in that in no other case were any of the three types of training dosage associated Coalition Internal Functioning, Comprehensiveness of Strategies or Facilitation of Community Changes (Tables 20-22)

Table 20. Training Dosage Predicting Coalition Internal Functioning

		Mod	el 1		Model 2				
Variable	В	SE B	β	р	В	SE B	β	р	
(Constant)	47	.22		.030	48	.28		.086	
Time 1 Internal Functioning	.22	.07	0.23**	.001	.22	.07	0.23**	.001	
1-2 staff vs. no staff	.68	.22	0.39**	.002	.67	.22	0.39**	.002	
3-5 staff vs. no staff	.85	.24	0.43***	.000	.85	.24	0.43***	.000	
6 or more staff vs. no staff	.87	.28	0.31**	.002	.91	.29	0.32**	.002	
Survey Year 2006 vs. 2005	19	.12	-0.11	.107	19	.12	-0.12	.112	
Training Breadth					04	.03	-0.15	.186	
Training Frequency					.12	.06	0.18*	.040	
Training Intensity					.02	.09	0.02	.812	
$R^2$	0.16				0.18				
F for change in $R^2$	6.76***			.000	1.47			0.22	

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 21. Training Dosage Predicting Comprehensiveness of Strategies

		Mod	el I			Мо	del 2	
	В	SE B	β	p	В	SE B	β	p
(Constant)	42	.15		.004	65	.21		.002
Time 1 Comprehensive Strategies	.23	.06	0.26***	.000	.23	.06	0.26***	.000
Have DFC Grant vs. no Grant	.62	.16	0.27***	.000	.65	.16	0.29***	.000
Training Breadth					01	.03	-0.05	.655
Training Frequency					.03	.06	0.05	.607
Training Intensity					.12	.09	0.12	.180
$R^2$	0.16				0.17			
F for change in R <sup>2</sup>	16.77***			.000	0.82			0.487

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 22. Training Dosage Predicting Facilitation of Community Change

		N	Iodel 1			Mo	del 2	
Variable	В	SE B	β	p	В	SE B	β	p
(Constant)	56	.24		.021	60	.31	1	.056
1-2 staff vs. no staff	.61	.26	0.31*	.019	.63	.26	0.32*	.018
3-5 staff vs. no staff	.94	.28	0.42**	.001	.98	.29	0.44**	.001
6 or more staff vs. no staff	.80	.32	0.25*	.015	.82	.34	0.26*	.014
Training Breadth					03	.04	-0.08	.480
Training Frequency					01	.07	-0.01	.880
Training Intensity					.07	.10	0.07	.497
$R^2$	0.06				0.07			
F for change in R <sup>2</sup>	4.02**	001		0.008	0.35			0.787

\* P < .05; \*\* P < .01, \*\*\* P < .001

#### **Dosage Quartiles**

To further explore the relationship between dosage and community capacity for problem solving, the three dosage types were divided into quartiles and the bottom and top quartiles were used as independent variables in the regression model. Other studies have also divided participants into groups based on their level of attendance (e.g., high vs. low participator) in order to compare outcomes among the attendance groupings (Chaput et al., 2004). While this still allows a comparison of outcomes based on more or less participation, it also informs potential cut-offs to compare outcomes determined by levels of participation. Quartiles were used as cut-offs in this study since this can not be informed by existing standards for training dosage cut-offs. However, since the previous analyses did not indicate that there were incremental gains in community problem solving capacity related to incremental increases in dosage, comparison of the top and bottom quartiles offered another opportunity to examine the dose-response relationship for

coalition training. Nine separate regressions were run, testing each dosage quartile pair to each DV. Covariates were entered into the first block and then the dummy coded quartile dosage variable was entered into the second block, with the bottom quartile as the reference group. This did reduce the sample size - Training Breadth Quartiles analyses (n=119), Training Frequency Quartiles analyses (n=131) and Training Intensity Quartiles analyses (n=137).

While the Multiple R for the regression models predicting each of the three elements of community problem solving using only the covariates were statistically significant, the addition of the dummy coded quartile dosage variables only significantly increased the variance explained in one case (Tables 23-31). Specifically, the Multiple R for Training Frequency Quartile predicting Coalition Internal Functioning was significant, F (4, 126) = 3.38, p<.0.01).  $R^2$  did increase significantly with the addition of the training frequency quartile variable, ( $R^2$  Change=.03, p<.05). Examination of the coefficients indicated that there was an effect for the top quartile of training frequency  $(\beta = .17, t(125) = 1.99), p < .05)$ , indicating that in comparison to the bottom quartile, coalitions that were in the top quartile for training frequency experienced higher levels of coalition internal functioning at post-test. Coalitions in the top quartile for training frequency sent at least two or more individuals to additional CADCA training; while coalitions in the bottom quartile did not send any individuals to additional training. Mean scores for Time 2 Internal Functioning for both groups were as follows: bottom quartile, M=.02 (SD = .89) and top quartile, M=.35 (SD=.64).

Table 23. Training Breadth Quartiles Predicting Coalition Internal Functioning (n=119)

		M	lodel 1		Model 2					
Variable	В	SE B	β	p	В	SE B	β	p		
(Constant)	61	.29		.034	60	.30		.045		
Time 1 Internal Functioning	.14	.09	0.13	.128	.14	.09	0.13	.132		
1-2 staff vs. no staff	.58	.31	0.33	.060	.57	.31	0.33	.063		
3-5 staff vs. no staff	.98	.32	0.51**	.002	.99	.33	0.51**	.002		
6 or more staff vs. no staff	1.00	.37	0.36**	.007	1.00	.37	0.36**	.007		
Top quartile vs. Bottom quartile					02	.16	-0.01	.903		
$R^2$	0.13				0.13					
F for change in R <sup>2</sup>	4.11**			0.004	0.02			0.90		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 24. Training Frequency Quartiles Predicting Coalition Internal Functioning (n=131)

		Mod	el 1		Model 2					
Variable	В	SE B	β	р	В	SE B	β	р		
(Constant)	.01	.25		.973	15	.26		.560		
Time 1 Internal Functioning	.20	.07	.23	.007	.19	.07	.22**	.008		
1-2 staff vs. no staff	.13	.25	.07	.611	.14	.25	.08	.559		
3-5 staff vs. no staff	.39	.27	.21	.145	.37	.26	.20	.165		
6 or more staff vs. no staff	.45	.32	.16	.168	.50	.32	.18	.121		
Survey Year 2006 vs. 2005	20	.13	.13	.137	15	.14	09	.275		
Top quartile vs. Bottom quartile					.27	.14	.17*	.046		
$R^2$	0.12				0.14					
F for change in R <sup>2</sup>	3.30**			.008	3.96*			.049		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 25. Training Intensity Quartiles Predicting Coalition Internal Functioning (n=137)

		Mod	lel 1		Model 2					
Variable	В	SE B	β	р.	В	SE B	β	p		
(Constant)	44	.22		.051	32	.25		.211		
Time 1 Internal Functioning	.20	.08	.20*	.015	.21	.08	.22*	.011		
1-2 staff vs. no staff	.51	.24	.30*	.035	.48	.25	.28*	.049		
3-5 staff vs. no staff	.76	.26	.39**	.004	.75	.26	.39**	.005		
6 or more staff vs. no staff	.78	.31	.29*	.012	.74	.31	.27*	.019		
Top quartile vs. Bottom quartile					15	.15	08	.307		
$R^2$	0.13				0.14					
F for change in $R^2$	4.98**			.001	1.02			.314		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 26. Training Breadth Quartiles Predicting Comprehensiveness of Strategies (n=119)

		Mod	lel 1		Model 2					
Variable	В	SE B	β	р	В	SE B	β	p		
(Constant)	34	.18		.055	34	.20		.080		
Time 1 Comprehensive Strategies	.34	.08	0.35***	.000	.34	.08	0.35***	.000		
Have DFC Grant vs. no Grant	.46	.20	0.20*	.021	.46	.20	0.20*	.022		
Top quartile vs. Bottom quartile					.00	.16	0.00	.978		
$R^2$	0.18				0.18					
F for change in R <sup>2</sup>	13.10***			.000	0.00			0.96		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 27. Training Frequency Quartiles Predicting Comprehensiveness of Strategies (n=131)

		Mod	lel 1	Model 2				
Variable	В	SE B	β	p	В	SE B	β	р
(Constant)	28	.16		.084	31	.17		.071
Time 1								
Comprehensive	.31	.08	0.33***	.000	.31	.08	0.33***	.000
Strategies								
Have DFC Grant vs.	47	10	0.20*	012	45	10	0.20*	01.6
no Grant	.46	.18	0.20*	.013	.45	.19	0.20*	.016
Top quartile vs.					00	1.5	0.04	507
Bottom quartile					.08	.15	0.04	.596
$R^2$	0.17				0.17			
F for change in $R^2$	13.34***			.000	0.29			0.60

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 28. Training Intensity Quartiles Predicting Comprehensiveness of Strategies (n=137)

		Mode	11	Model 2				
Variable	В	SE B	β	р	В	SE B	β	р
(Constant)	36	.16		.031	47	.20		.021
Time 1 Comprehensive Strategies	.23	.07	0.25**	.002	.22	.07	0.25**	.002
Have DFC Grant vs. no Grant	.58	.18	0.26**	.002	.60	.18	0.27**	.001
Top quartile vs. Bottom quartile					.15	.15	0.08	.337
$R^2$	0.14				0.14			
F for change in $R^2$	10.77***			.000	0.94			0.334

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 29. Training Breadth Quartiles Predicting Facilitation of Community Change (n=119)

	Model 1					Model 2				
Variable	В	SE B	β	p	В	SE B	β	p		
(Constant)	25	.34		.462	17	.35		.619		
1-2 staff vs. no staff	.19	.36	0.10	.603	.17	.36	0.09	.638		
3-5 staff vs. no staff	.71	.37	0.33	.057	.73	.37	0.34	.052		
6 or more staff vs. no staff	.60	.43	0.19	.158	.57	.43	0.19	.180		
Γορ quartile vs. Bottom quartile					15	.18	-0.08	.411		
$R^2$	0.07				0.08					
F for change in $R^2$	2.91*			0.038	0.69			0.410		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 30. Training Frequency Quartiles Predicting Facilitation of Community Change (n=131)

	Model 1				Model 2				
Variable	В	SE B	β	р	В	SE B	β	p	
(Constant)	10	.28		.725	13	.29		.651	
1-2 staff vs. no staff	.07	.30	0.04	.808	.08	.30	0.04	.803	
3-5 staff vs. no staff	.42	.32	0.21	.181	.41	.32	0.20	.192	
6 or more staff vs. no staff	.42	.38	0.13	.272	.43	.39	0.13	.265	
Top quartile vs. Bottom quartile			····		.07	.16	0.04	.662	
$R^2$	0.04				0.04				
F for change in $R^2$	1.57			0.200	0.19			0.666	

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 31. Training Intensity Quartiles Predicting Facilitation of Community Change (n=137)

		M	lodel 1			Mo	del 2	
Variable	В	SE B	β	p	В	SE B	β	р
(Constant)	36	.27		.173	37	.30		.218
1-2 staff vs. no staff	.47	.29	0.25	.101	.48	.29	0.25	.103
3-5 staff vs. no staff	.68	.31	0.32*	.029	.68	.31	0.31*	.030
6 or more staff vs. no staff	.72	.36	0.23*	.049	.72	.37	0.23	.051
Top quartile vs. Bottom quartile					.01	.17	0.00	.967
$R^2$	0.04				0.04			
F for change in $R^2$	1.85			0.141	0.00			0.96

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Proposition #1: Coalitions with both high training breadth and frequency will have the highest levels of improvement in each of the three elements of community problem solving capacity.

An analysis of a potential interaction between training breadth (i.e., the unique number of individuals in a coalition trained) and training frequency (i.e., the total number of individuals attending more than one training) was conducted to determine if higher levels of community problem solving capacity were found when both a greater unique numbers of individuals were trained and higher numbers of individuals received additional training. Training breadth and frequency were both centered, and hierarchical multiple regression was used, with the covariates entered into the first block, training breadth and training frequency entered into the second block, and the interaction between breadth and training entered into the third block (Tables 32-34).

For Coalition Internal Functioning, the Multiple R for the regression model using

only the covariates was significant, but  $R^2$  did not significantly increase with the addition of the dosage variables and interaction term. While examination of the coefficients does indicate a main effect for Training Frequency, ( $\beta$ = .18, t (174) = 2.07), p<.05), since the overall model fit does not improve significantly, training frequency does not account for a significant amount of overall variance in post-test Coalition Internal Functioning. For Comprehensiveness of Strategies and Facilitation of Community Change, while multiple R for all the regression models using only the covariates was significant, there were no main effects for either training breadth or training frequency, and the interaction between training breadth and frequency was nonsignificant in the analyses.  $R^2$  did not significantly increase with the addition of the dosage variables and interaction term. Overall, the interaction of training breadth and frequency was not associated with any of the elements of community problem solving capacity.

Table 32. Interaction of Training Breadth and Frequency Predicting Coalition Internal

Functioning

	ľ	Model 1	l	]	Model 2	2		Model	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	47	.22		46	.22		46	.22	
Time 1 Internal Functioning	.22	.07	.23**	.22	.07	.23**	.22	.07	.23**
1-2 staff vs. no staff	.67	.22	.39**	.66	.22	.39**	.67	.22	.39**
3-5 staff vs. no staff	.85	.24	.43***	.84	.24	.42***	.84	.24	.42***
6 or more staff vs. no staff	.87	.28	.31**	.89	.28	.31**	.89	.28	.31**
Survey Year 2006 vs. 2005	19	.12	11	19	.12	11	19	.12	11
Training Breadth				04	.03	13	04	.03	13
Training Frequency				.11	.06	.18*	.12	.06	.18
Training Breadth X Training Frequency							.00	.01	01
$R^2$	0.16			0.18			0.18		
F for change in $R^2$	6.76***			2.19			0.02		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 33. Interaction of Training Breadth and Frequency Predicting Comprehensiveness

of Strategies

	N	Model 1			Mode	1 2		Model	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	42	.15		41	.15		41	.15	
Time 1 Comprehensive Strategies	.23	.06	0.26***	.23	.06	0.26***	.23	.06	0.26***
Have DFC Grant vs. no Grant	.62	.16	0.27***	.62	.16	0.27***	.62	.16	0.27***
Training Breadth				.01	.03	0.04	.01	.03	0.05
Training Frequency				.01	.06	0.02	.02	.06	0.02
Training Breadth X Training Frequency							.00	.01	-0.02
$R^2$	0.16			0.16			0.16		
F for change in $R^2$	16.77***			0.32			0.03		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 34. Interaction of Training Breadth and Frequency Predicting Facilitation of

**Community Change** 

		Model 1			Model 2			Model 3	
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	56	.24		55	.24		52	.24	
1-2 staff vs. no staff	.61	.26	0.31*	.60	.26	0.31*	.60	.26	0.31*
3-5 staff vs. no staff	.94	.28	0.42**	.96	.28	0.43**	.97	.28	0.43**
6 or more staff vs. no staff	.80	.33	0.25*	.78	.33	0.24*	.79	.33	0.25*
Training Breadth				01	.03	-0.03	.01	.03	0.04
Training Frequency				02	.07	-0.03	.01	.07	0.01
Training Breadth X Training Frequency					·		02	.01	-0.18
$R^2$	0.06			0.07			0.09		
F for change in  R <sup>2</sup>	4.02**			0.30			3.70		

<sup>\*</sup> P < .05; \*\* P < .01

Proposition #2: The amount of training a coalition needs to build coalition capacity for community problem solving will be related to the age of the coalition.

An exploratory analysis of a potential moderating effect for coalition age was conducted to determine if the amount of training exposure needed to build coalition capacity for community problem solving varied with coalition age. Nine separate hierarchical regressions were conducted, with the covariates entered into the 1<sup>st</sup> Block, the dosage measure and coalition age entered into the 2<sup>nd</sup> Block, and the interaction between coalition age and the dosage variable entered into the 3rd Block. As in previous analyses, while the multiple R for all analyses that included just the covariates was statistically significant, the amount of variance explained did not increase significantly when coalition age or the interaction between dosage and age were added. Coalition age had neither a main effect on the dependent variables nor an interaction effect with any of the dosage measures. Coalition age was not significantly associated with elements of community problem solving; nor did the amount of training needed to build coalition capacity for community problem solving vary with the age of the coalition (Tables 35-43).

Table 35. Coalition Age as Moderator of Relationship between Training Breadth and Coalition Internal Functioning

		Model 1			Model 2	2		Model :	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	46	.21		39	.24		21	.27	
Time 1 Internal Functioning	.14	.07	0.15*	.15	.07	0.16*	.15	.07	0.17*
1-2 staff vs. no staff	.63	.22	0.39**	.65	.22	0.40**	.68	.22	0.42**
3-5 staff vs. no staff	.79	.24	0.43**	.79	.24	0.43**	.81	.24	0.44**
6 or more staff vs. no staff	.84	.28	0.31**	.85	.28	0.32**	.86	.28	0.32**
Training Breadth				.00	.02	0.01	05	.04	-0.17
Coalition Age				01	.01	-0.07	03	.02	-0.22
Training Breadth X Coalition Age							.01	.00	0.25
$R^2$	0.10			0.11			0.12		
F for change in $R^2$	4.66**	(* D		0.50			1.88		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 36. Coalition Age as Moderator of Relationship between Training Frequency and Coalition Internal Functioning

		Model 1	-		Model 2			Model 3	
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	37	.22		39	.25	.00	32	.26	.00
Time 1 Internal Functioning	.14	.07	.16	.15	.07	.16	.15	.07	.17*
1-2 staff vs. no staff	.61	.22	.38	.65	.22	.40	.65	.22	.40**
3-5 staff vs. no staff	.76	.24	.41	.75	.24	.41	.75	.24	.41**
6 or more staff vs. no staff	.79	.28	.29	.84	.28	.31	.84	.28	.31**
Survey Year	16	.12	10	13	.12	08	14	.12	09
Training Frequency				.07	.04	.11	.00	.10	.01
Coalition Age				01	.01	07	01	.01	12
Training Frequency X Coalition Age					A- 1- W		.01	.01	.12
$R^2$	0.11			0.13			0.13		
F for change in R <sup>2</sup>	4.12**			1.63			0.49		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 37. Coalition Age as Moderator of Relationship between Training Intensity and Coalition Internal Functioning

		Model 1			Model 2			Model	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	46	.21		33	.28		13	.33	
Time 1 Internal Functioning	.14	.07	0.15*	.15	.07	0.16*	.15	.07	0.17*
1-2 staff vs. no staff	.63	.22	0.39**	.64	.22	0.39**	.66	.23	0.41**
3-5 staff vs. no staff	.79	.24	0.43**	.79	.24	0.43**	.80	.24	0.43**
6 or more staff vs. no staff	.84	.28	0.31**	.84	.28	0.31**	.84	.28	0.31**
Training Intensity				02	.07	-0.02	13	.12	-0.15
Coalition Age				01	.01	-0.08	03	.02	-0.24
Training Intensity X Coalition Age							.01	.01	0.22
$R^2$	0.11			0.12			0.13		
F for change in $\mathbb{R}^2$	4.12**			0.59			1.42		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 38. Coalition Age as Moderator of Relationship between Training Breadth and Comprehensiveness of Strategies

	N	1 lodel			Model 2			Model	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	25	.14		35	.20		24	.25	
Time 1 Comprehensive Strategies	.18	.06	0.21**	.18	.06	0.22**	.18	.06	0.22**
Have DFC Grant vs. no Grant	.47	.16	0.22**	.47	.16	0.22**	.47	.16	0.22**
Training Breadth				.01	.02	0.03	02	.04	-0.07
Coalition Age				.00	.01	0.04	.00	.02	-0.04
Training Breadth X Coalition Age							.00	.00	0.14
$R^2$	0.10			0.11			0.11		
F for change in $R^2$	9.60***			0.23			0.61		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 39. Coalition Age as Moderator of Relationship between Training Frequency and Comprehensiveness of Strategies

		Model 1			Model 2			Model	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	25	.14		33	.19		32	.20	
Time 1 Comprehensive Strategies	.18	.06	0.21**	.18	.06	0.22**	.18	.06	0.22**
Have DFC Grant vs. no Grant	.47	.16	0.22**	.46	.16	0.22**	.46	.16	0.22**
Training Frequency				.02	.04	0.03	.00	.10	0.01
Coalition Age				.00	.01	0.04	.00	.01	0.03
Training Frequency X Coalition Age							.00	.01	0.03
$R^2$	0.10			0.11			0.11		
F for change in $\mathbb{R}^2$	9.60***			0.24			0.02		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 40. Coalition Age as Moderator of Relationship between Training Intensity and Comprehensiveness of Strategies

	N	1 lodel			Model 2			Model	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	25	.14		48	.24		31	.31	
Time 1 Comprehensive Strategies	.18	.06	0.21**	.18	.06	0.22**	.17	.06	0.21**
Have DFC Grant vs. no Grant	.47	.16	0.22**	.50	.16	0.24**	.49	.16	0.23**
Training Intensity				.07	.06	0.08	01	.12	-0.02
Coalition Age				.01	.01	0.04	01	.02	-0.09
Training Intensity X Coalition Age							.01	.01	0.17
$R^2$	0.10			0.11			0.11		
F for change in $R^2$	9.60***			0.79			0.72		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 41. Coalition Age as Moderator of Relationship between Training Breadth and Facilitation of Community Change

		Model 1			Model 2			Model 3	
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	47	.25		16	.29		.02	.32	
1-2 staff vs. no staff	.56	.26	0.30*	.59	.26	0.31*	.62	.26	0.33*
3-5 staff vs. no staff	.85	.28	0.40**	.90	.28	0.42**	.92	.28	0.43**
6 or more staff vs. no staff	.67	.33	0.22*	.69	.33	0.22*	.70	.33	0.22*
Training Breadth				03	.02	-0.08	07	.05	-0.24
Coalition Age				02	.01	-0.14	04	.02	-0.26*
Training Breadth X Coalition Age							.00	.00	0.21
$R^2$	0.05			0.08			0.09		
F for change in $R^2$	3.12*			2.27			1.35		

<sup>\*</sup> P < .05; \*\* P < .01

Table 42. Coalition Age as Moderator of Relationship between Training Frequency and Facilitation of Community Change

		Model 1			Model 2			Model :	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	47	.25		20	.28		03	.29	
1-2 staff vs. no staff	.56	.26	0.30*	.60	.26	0.32*	.60	.26	0.32*
3-5 staff vs. no staff	.85	.28	0.40**	.89	.28	0.42**	.88	.28	0.41**
6 or more staff vs. no staff	.67	.33	0.22*	.68	.33	0.22*	.68	.33	0.22*
Training Frequency				06	.05	-0.08	22	.12	-0.32*
Coalition Age				02	.01	-0.14	04	.02	-0.25**
Training Frequency X Coalition Age							.02	.01	0.28
$R^2$	0.05			0.08			0.10		
F for change in $\mathbb{R}^2$	3.12*			2.18			2.59		

<sup>\*</sup> P < .05; \*\* P < .01

Table 43. Coalition Age as Moderator of Relationship between Training Intensity and Facilitation of Community Change

		Model 1	<u> </u>		Model 2	2		Model	3
Variable	В	SE B	β	В	SE B	β	В	SE B	β
(Constant)	47	.25		25	.33	· · · · · · · · · · · · · · · · · · ·	.03	.39	
1-2 staff vs. no staff	.56	.26	0.30*	.60	.27	0.32*	.62	.27	0.33*
3-5 staff vs. no staff	.85	.28	0.40**	.87	.28	0.41**	.88	.28	0.41**
6 or more staff vs. no staff	.67	.33	0.22*	.70	.34	0.22*	.71	.34	0.23*
Training Intensity				01	.08	-0.01	14	.15	-0.13
Coalition Age				02	.01	-0.14	04	.03	-0.30
Training Intensity X Coalition Age							.01	.01	0.21
$R^2$	0.05			0.07			0.08		
F for change in $R^2$	3.12*			1.67			1.07		

<sup>\*</sup> P < .05; \*\* P < .01

Further Examination of Other Factors Related to Community Problem Solving Capacity

Technical Assistance and its Relationship to Coalition Community Problem Solving

Additional analyses were conducted to determine if technical assistance predicted coalition outcomes. The Institute's previous evaluation suggested that technical assistance (TA) was a key factor in coalition effectiveness (Foster-Fishman, Law & Ahn, 2008) so this finding was retested here. As part of the Annual Survey, coalitions reported if they had received technical assistance in the form of email, phone or brief one-on-one "personal coaching" in the last 12 months. Out of the total 269 sample, 40% of coalitions indicated they had received TA in the last 12 months (n=108) and 60% indicated they have not received TA (n=161). Results of t-test analyses comparing the no-TA and TA groups are provided below in Table 44.

Table 44. Bivariate Relationships of Technical Assistance Status with Elements of Community Problem Solving Capacity

	Technical A	ssistance Status	
Mean Comparisons	M	(SD)	Sig.
	No TA	Received TA	
	(n=161)	(n=108)	
Time 1			
Coalition Internal Functioning	.005	.220	t = -1.76
	(1.02)	(0.92)	(df = 267, p = .078)
	.004	.108	t =85
Comprehensiveness of Strategies	(0.98)	(0.98)	(df = 267, p = .394)
Time 2 Coalition Internal Functioning	130	.284	t = -3.43
Ç	(1.10)	(0.74)	(df = 267, p = .001)**
	107	.212	t = -2.57
Comprehensiveness of Strategies	(1.12)	(0.77)	(df = 267, p = .010) *
	057	.131	t = -1.49
Facilitation of Community Changes	(1.11)	(0.84)	(df = 267, p = .136)

<sup>\*</sup> P < .01; \*\* P < .001

The results indicated that the coalitions that had received Technical Assistance did not vary from the non-Technical Assistance group at Time 1 in Coalition Internal Functioning or Comprehensiveness of Strategies. However, at Time 2, there were

significant differences between the two groups, with the TA group having higher

Coalition Internal Functioning and Comprehensiveness of Strategies scores. There were

no group differences in Facilitation of Community Change.

The relationship of technical assistance to coalition capacity for community problem solving was further examined with a series of hierarchical multiple regressions. The technical assistance variable was dummy coded before it was entered into the analysis as the independent variable, with the non-TA category as the reference group. As in all previous analyses, Time 1 scores and covariates were entered into block 1 and TA status was entered into block 2. Three separate regressions were run, one for each dependent variable (Tables 45-47).

Multiple R for the regression model predicting Time 2 coalition internal functioning using only the covariates was statistically significant (F (4, 264) = 10.87 p<.001), predicting 14% of the variance. Adding the technical assistance variable significantly increased the amount of variance explained (17%) in post-test Internal Functioning ( $R^2$  Change=.02, p<.01). Technical assistance in the past 12 months was a statistically significant predictor of Time 2 coalition internal functioning, ( $\beta$  = .16, t (263) = 2.78, p<.01) with those coalitions who had received TA having higher scores in the DV. However, adding the technical assistance variable to the Comprehensive Change and Facilitation of Community Change models did not significantly increase the variance accounted for in the dependent variables, nor was it a significant predictor of these DVs.

Table 45. Technical Assistance Predicting Coalition Internal Functioning

		Mod	lel 1			M	odel 2	
Variable	В	SE B	β	p	В	SE B	β	p
(Constant)	39	.18		.027	48	.18		.006
Time 1 Internal Functioning	.29	.06	0.28***	.000	.27	.06	0.27***	.000
1-2 staff vs. no staff	.35	.19	0.18	.063	.33	.19	0.16	.083
3-5 staff vs. no staff	.57	.21	0.24**	.008	.52	.21	0.22*	.015
6 or more staff vs. no staff	.66	.25	0.20**	.009	.612	.25	0.19*	.014
Received TA		_			.32	.11	0.16**	.005
$R^2$	0.14				0.17			
F for change in R <sup>2</sup>	10.87***			.000	7.70**			0.006

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 46. Technical Assistance Predicting Comprehensiveness of Strategies

		Mod	el I			Mo	del 2	
Variable	В	SE B	β	р	В	SE B	β	р
(Constant)	48	.12		.000	49	.12		.000
Time 1								
Comprehensive	.23	.06	0.23***	.000	.23	.06	0.22***	.000
Strategies								
Have DFC Grant vs.	22		0.15+	015	22	• •	0.44	
no Grant	.33	.14	0.15*	.017	.32	.14	0.15*	.022
Budget \$100,000-								
\$199,999 vs. Less	.44	.15	0.21**	.003	.41	.15	0.19**	.007
than \$100,000								
Budget \$200,000 and								
above vs. Less than	.38	.15	0.17*	.012	.36	.15	0.16*	.019
\$100,000								
Received TA					.10	.12	0.05	.439
$R^2$	0.15				0.16			
F for change in $R^2$	11.95***			.000	0.60			0.439

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 47. Technical Assistance Predicting Facilitation of Community Change

		M	lodel 1			M	lodel 2	
Variable								
(Constant)	65	.19		.001	66	.19		.000
Budget \$100,000- \$199,999 vs. Less than \$100,000	.32	.14	0.15*	.028	.30	.15	0.14	.050
Budget \$200,000 and above vs. Less than \$100,000	.20	.16	0.09	.210	.19	.16	0.08	.241
1-2 staff vs. no staff	.46	.20	0.23*	.023	.46	.20	0.23*	.024
3-5 staff vs. no staff	.80	.23	0.33**	.001	.79	.23	0.33**	.001
6 or more staff vs. no staff	.62	.27	0.18*	.022	.62	.27	0.18*	.023
Received TA					.05	.13	0.02	.723
$R^2$	0.08				0.08			
F for change in $R^2$	4.55**			0.001	0.13			0.720

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

#### Overall CADCA Touch

Since coalitions are able to receive both training and technical assistance from CADCA's Institute, further examination delved more closely into how the combination of training and technical assistance would have differential impacts on coalition outcomes. A variable was created categorizing the total sample (n=269) coalitions into 4 groups of varying levels/types of "CADCA Touch": no training or technical assistance, only training, only technical assistance, and both training and technical assistance. The means and standard deviations are presented in Table 48.

Table 48. Means and SD for Community Problem Solving by CADCA Touch

		N	Mean	SD
Time 1 Internal Functioning	no training or ta	65	15	1.17
runctioning	only training	96	.11	0.90
	only ta	22	.23	0.94
	both training and ta	86	.22	0.91
Time 1 Comprehensive	no training or ta	65	.00	0.95
Strategies	only training	96	.00	1.01
	only ta	22	.07	1.17
	both training and ta	86	.12	0.94
Time 2 Internal	no training or ta	65	36	1.30
Functioning	only training	96	.02	0.91
	only ta	22	.18	0.71
	both training and ta	86	.31	0.75
Time 2	no training or ta	65	29	1.31
Comprehensive Strategies	only training	96	.019	0.95
	only ta	22	.22	0.81
	both training and ta	86	.21	0.76
Time 2 Facilitation	no training or ta	65	34	1.13
of Community Change	only training	96	.13	1.06
	only ta	22	.40	0.85
	both training and ta	86	.06	0.83

A one-way analysis of variance was conducted to examine mean differences among the four groups in the elements of community problem solving at pre-test (Table 49). The analysis yielded no significant differences among groups in Time 1 variables, indicating there was no confound that coalitions with pre-existing higher levels of functioning seeking out training and TA.

Table 49. ANOVA Table for CADCA Touch on Pre-Test Community Problem Solving

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	5.74	3	1.91	1.98	0.117
Time 1 Internal Functioning	Within Groups	253.83	265	0.96		
	Total	259.56	268			
	Between Groups	0.88	3	0.29	0.30	0.827
Time 1 Comprehensive	Within Groups	257.15	265	0.97		
Strategies	Total	258.03	268	_		_

To examine the effect for varying levels and types of CADCA touch, hierarchical multiple regression was used to examine how well this variable predicted community problem solving after Time 1 scores and covariates were controlled for. The CADCA touch variable was dummy coded, with the no training/ta group used as the reference category. The training combination variables were used to predict each of the dependent variables. Covariates were entered in block 1 and the dummy coded CADCA touch variables were entered into block 2.

#### Internal Functioning

Multiple R for the regression model predicting Time 2 internal functioning using only the covariates was statistically significant (F (4, 264) = 10.87, p<.001), predicting 14% of the variance. The addition of the CADCA touch dummy coded variables significantly increased the amount of variance explained in post-test Internal Functioning ( $R^2$  Change=.04, p<.01). Examination of the coefficients indicated that there was an effect for receiving Training Only ( $\beta$ = .14, t(261) = 2.01), p<.05) and receiving Both Training and TA ( $\beta$ = .25, t(261) = 3.44, p<.01). In comparison to the no training/ta group, receipt of training and training combined with TA were associated with higher

internal functioning at time 2 (Table 50). Post-hoc analysis using the Bonferonni procedure indicated that the Both Training/TA group had significantly higher levels of post-test Coalition Internal Functioning than the No Touch (p < .001). The post-hoc analysis did not find any differences among any of the other groups. It appears that the highest post-test levels of Internal Coalition Functioning are experienced by coalitions that have received both training and TA. Figure 9 depicts the change in Time 1 to Time 2 scores for all four groups.

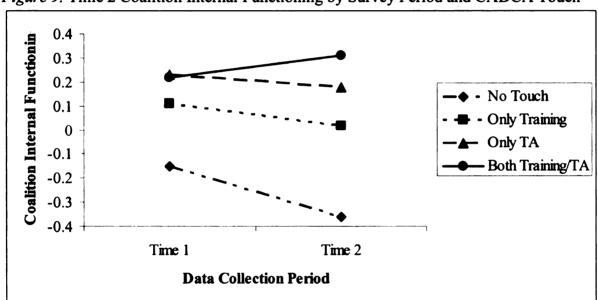


Figure 9. Time 2 Coalition Internal Functioning by Survey Period and CADCA Touch

Paired t-tests were used to examine this finding further. Pre and post-test differences in Coalition Internal Functioning were conducted for the No Touch and the Both Training/TA groups. For the No Touch Group, while they did experience a decrease from Time 1 to Time 2, this change was not significant, t(64) = 1.21, p = .228. The Both Training/TA Group increased from Time 1 to Time 2, but this increase was not statistically significant, t(85) = -.82, p = .414.

Comprehensiveness of Strategies

While the overall model was significant (F (7, 261) = 6.93 p < .001) explaining 15% of the variance in Time 2 Comprehensiveness of Strategies, the addition of the CADCA Touch variables did not improve model fit. Additionally, none of the coefficients for training and TA were significant (Table 51).

Facilitation of Community Change

Multiple R for the regression model predicting Time 2 internal functioning using only the covariates was statistically significant (F (5, 263) = 4.55, p<.01), predicting 8% of the variance in Time 2 Facilitation of Community Change scores. The addition of the CADCA Touch variables significantly improved model fit ( $R^2$  Change=.03, p<.05). Examination of the coefficients indicated there was an effect for the Only Training group ( $\beta$ = .17, t(260) = 2.23, p<.05) and Only TA group ( $\beta$ = .17, t(260) = 2.54, p=.05). In comparison to the no training/TA group, receiving either training or TA was associated with higher Community Change scores at post-test (Table 52). Post-hoc analysis using the Bonferonni procedure supported the findings from the multiple regression, indicating that the Only Training group (p<.05) and the Only TA group (p<.05) had significantly higher levels of Facilitation of Community Change than the No Touch. No other group mean comparisons were statistically significant.

Table 50. CADCA Touch Predicting Coalition Internal Functioning

		Mod	del 1			М	odel 2	
Variable	В	SE B	β	р	В	SE B	β	p
(Constant)	39	.18		.027	63	.19		.001
Time 1 Internal Functioning	.29	.06	0.28***	.000	.26	.06	0.26***	.000
1-2 staff vs. no staff	.35	.19	0.18	.063	.30	.19	0.15	.117
3-5 staff vs. no staff	.57	.21	0.24**	.008	.49	.21	0.21*	.021
6 or more staff vs. no staff	.66	.25	0.20**	.009	.61	.25	0.18*	.016
Only training vs. no training/ta					.30	.15	0.14*	.044
Only ta vs. no training/ta					.41	.23	0.11	.071
Training and TA vs. no training/TA		<del></del>		<del></del>	.52	.15	0.25**	.001
$R^2$	0.14				0.18			
F for change in $R^2$	10.87***			.000	4.02**			0.008

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 51. CADCA Touch Predicting Comprehensiveness of Strategies

		Mode	el 1			Mo	del 2	
Variable	В	SE B	β	p	В	SE B	β	р
(Constant)	48	.12		.000	54	.13		.000
Time 1 Comprehensive Strategies	.23	.06	0.23***	.000	.23	.06	0.22***	.000
Have DFC Grant vs. no Grant	.33	.14	0.15*	.017	.32	.15	0.14*	.029
Budget \$100,000- \$199,999 vs. Less than \$100,000	.44	.15	0.21**	.003	.41	.15	0.20**	.007
Budget \$200,000 and above vs. Less than \$100,000	.38	.15	0.17*	.012	.37	.16	0.16*	.017
Only training vs. no training/ta					.08	.16	0.04	.634

Table 51 (cont'd).						
Only ta vs. no training/ta			.33	.24	0.09	.163
Training and TA vs. no training/TA			.09	.18	0.04	.602
$R^2$	0.15		0.16			
F for change in R <sup>2</sup>	11.95***	.000	0.66			0.580

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 52. CADCA Touch Predicting Facilitation of Community Change

	Model 1				Model 2					
Variable	В	SE B	β	р	В	SE B	β	р		
(Constant)	65	.19		.001	86	.20		.000		
Budget \$100,000- \$199,999 vs. Less than \$100,000	.32	.14	0.15	.028	.26	.16	0.12	.097		
Budget \$200,000 and above vs. Less than \$100,000	.20	.16	0.09	.210	.18	.17	0.08	.297		
1-2 staff vs. no staff	.46	.20	0.23*	.023	.46	.20	0.22*	.023		
3-5 staff vs. no staff	.80	.23	0.33**	.001	.78	.23	0.32**	.001		
6 or more staff vs. no staff	.62	.27	0.18*	.022	.63	.27	0.19*	.020		
Only training vs. no training/ta					.36	.16	0.17*	.026		
Only ta vs. no training/ta					.62	.24	0.17*	.011		
Training and TA vs. no training/TA					.19	.18	0.09	.298		
$R^2$	0.08				0.11					
F for change in R <sup>2</sup>	4.55**			0.001	2.96*			0.033		

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

# Transfer of Learning

Additional analyses were conducted to determine the role transfer of learning plays in predicting community problem solving capacity for the 182 coalitions that have

received training. A transfer of learning variable was created by averaging the responses for 4 items in the 2008 Annual Survey capturing if in the past 12 months training, technical assistance and publication materials from CADCA have been: 1) used to inform decision making within the coalition; 2) shared with other individuals in the coalition; 3) shared with others in the community (outside the coalition membership): and 4) if the individuals trained/received technical assistance were still involved on the coalition. The first three variables were on a 4 point scale ranging from 1 = not at all to 4 = a great deal. The fourth variable was also on a 4-point scale, with 1 = none and 4 = all. The 4-item scale had an alpha of .55 for the total sample (Dosage sub-sample  $\alpha = .52$ , Untrained sub-sample  $\alpha = .62$ ).

Mean value for transfer of learning for the dosage sample was 3.30 (SD = .50). Transfer of learning was not correlated significantly with any of the pre-test scores for community problem solving. However, it was significantly positively correlated with all the post-test scores for the DVs: Internal Functioning, r(180) = .37, p < .001; Comprehensiveness of Strategies, r(180) = .33, p < .01; Facilitation of Community Changes, r(180) = .18, p < .05.

To examine this relationship further, hierarchical multiple regressions were used to determine if transfer of learning significantly predicted Coalition Internal Functioning, Comprehensiveness of Strategies and Facilitation of Community Changes. Covariates were entered into block 1 and the transfer variable was entered into block 2. Three separate regressions were run, examining the relationship between transfer and each of the three dependent variables.

## **Internal Functioning**

Multiple R for the regression model predicting Time 2 coalition internal functioning using only the covariates was statistically significant (F (4, 177) = 7.57, p<.001). The model predicted 15% of the variance in Time 2 coalition internal functioning. When the transfer item was added, the model did improve significantly ( $R^2$  Change=.11, p<.001), explaining 26% of the total variance. Examination of the coefficients indicated a significant main effect for transfer ( $\beta$  = .34, t (176) = 4.64, p< .001), indicating that transfer of learning is associated with higher levels of Coalition Internal Functioning (Table 53).

## Comprehensiveness of Strategies

Multiple R for the regression model predicting Time 2 comprehensiveness of strategies using only the covariates was statistically significant (F (2, 179) = 15.80, p<.001). The model predicted 15% of the variance in Time 2 coalition internal functioning. Transfer of learning significantly improved the model fit ( $R^2$  Change=.07, p<.01), with the model now explaining 22% of the total variance. Examination of the coefficients indicated a significant main effect for transfer, ( $\beta$ = .27, t(178) = 3.43, p<.01). Greater comprehensiveness of strategies is associated with higher levels of transfer of learning (Table 54).

# Facilitation of Community Changes

Multiple R for the regression model predicting Time 2 facilitation of community change using only the covariates was statistically significant (F (3, 178) = 3.99, p<.01). The model predicted 6% of the variance in Time 2 coalition internal functioning. Model fit improved with the addition of the transfer variable ( $R^2$  Change=.03, p<.05), explaining

9% of the total variance in the DV. There was a significant main effect for transfer, ( $\beta$ = .16, t(177) = 2.15, p<.05), indicating greater transfer is associated with higher levels of facilitation of community change (Table 55).

Table 53. Transfer of Learning Predicting Coalition Internal Functioning

		Mod	el l			Mod	el 2	
Variable	В	SE B	β	р	В	SE B	β	р
(Constant)	59	.21		.004	-2.50	.45		.000
Time 1 Internal Functioning	.21	.07	0.22**	.002	.17	.06	0.18**	.009
1-2 staff vs. no staff	.70	.22	0.41**	.001	.71	.21	0.41**	.001
3-5 staff vs. no staff	.89	.24	0.45***	.000	.84	.23	0.43***	.000
6 or more staff vs. no staff	.93	.28	0.33**	.001	1.00	.26	0.35***	.000
Transfer					.58	.13	0.34***	.000
$R^2$	0.15				0.26			.000
F for change in $R^2$	7.57***			.000	27.13***			.000

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 54. Transfer of Learning Predicting Comprehensiveness of Strategies

		М	odel 1		Model 2				
Variable	В	SE B	β	р	В	SE B	β	р	
(Constant)	42	.15		.004	-1.85	.43		.000	
Time 1 Comprehensive Strategies	.23	.06	0.25***	.000	.23	.06	0.25***	.000	
Have DFC Grant vs. no Grant	.62	.16	0.27***	.000	.49	.16	0.21**	.003	
Transfer					.47	.14	0.27**	.001	
$R^2$	0.15				0.22				
F for change in $R^2$	15.80***			0.000	8.10**			0.002	

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Table 55. Transfer of Learning Predicting Facilitation of Community Change

		N	1odel 1		Model 2					
Variable	В	SE B	β	p	В	SE B	β	p		
(Constant)	56	.24		.021	-1.59	.54		.003		
1-2 staff vs. no staff	.61	.26	0.32*	.019	.60	.26	0.31*	.019		
3-5 staff vs. no staff	.94	.28	0.42**	.001	.90	.28	0.41**	.001		
6 or more staff vs. no staff	.80	.33	0.25*	.015	.82	.32	0.26*	.011		
Transfer	····				.32	.15	0.16*	.032		
$R^2$	0.06				0.09					
F for change in $\mathbb{R}^2$	3.99**			0.009	5.08*			0.047		

<sup>\*</sup> P < .05; \*\* P < .01

Transfer of Learning by Varying Levels of CADCA Touch

A one-way ANOVA was used to test if there were group differences among the

CADCA touch categories in amount of transfer of learning. The total sample was used and divided into the four CADCA Touch categories. The mean scores for the No Touch, Training only, TA only and Both Training/TA groups for transfer of learning were 2.99 (SD = 0.68), 3.18 (SD = 0.53), 3.21 (SD = 0.71), and 3.43 (SD = 0.43). The ANOVA revealed a significant effect for CADCA Touch, F (3, 265) = 7.74, p < .01). Post-hoc analysis using the Bonferonni procedure indicated that the Both Training/TA group had significantly higher levels of transfer than the No Touch (p < .01) and Only Training Groups (p < .05). It appears that the highest levels of transfer are occurring with the coalitions that have received both training and TA.

## Testing CADCA's Theory of Change

CADCA's theory of change was examined using hierarchical multiple regressions. The theory of change posits that Internal Functioning predicts Comprehensiveness of Strategies which predicts Facilitation of Change. Multiple regressions were performed to assess each of these relationships, with DFC status, budget and staff covaried out. These analyses were run with the entire sample of coalitions (n=269).

Relationship between Internal Functioning and Comprehensiveness of Strategies

A Coalition Internal Functioning Change Score was created by subtracting Time 1 scores from Time 2 scores. The change variable was used as the predictor in the analysis. The mean for the change score was -0.06 (SD = 1.14). Multiple R for the regression model predicting Time 2 Comprehensives of Strategies using only the covariates was statistically significant (F (3, 265) = 10.16, p < .001), predicting 10% of the variance in Time 2 Comprehensiveness of Strategies. The addition of the Internal Functioning

change score improved model fit ( $R^2$  Change=.08, p<.001). Examination of the coefficient for the Internal Functioning Change variable indicated an effect ( $\beta$ = .28, t(264) = 4.86, p<.001), demonstrating that greater change between Time 1 and Time 2 Internal Functioning scores was related to higher comprehensiveness of strategies (Table 56).

Table 56. Change in Internal Functioning Predicting Comprehensiveness of Strategies

	Model 1					Model 2			
Variable	В	SE B	β	р	В	SE B	β	р	
(Constant)	52	.12		.000	49	.11		.000	
Have DFC Grant vs. no Grant	.40	.14	0.18**	.004	.35	.14	0.16*	.010	
Budget \$100,000- \$199,999 vs. Less than \$100,000	.41	.15	0.19**	.006	.42	.14	0.20**	.004	
Budget \$200,000 and above vs. Less than \$100,000	.42	.16	0.18**	.007	.48	.15	0.21**	.001	
Change in Internal Functioning					.25	.05	0.28***	.000	
$R^2$	0.10				0.18				
F for change in R <sup>2</sup>	10.16***			.000	25.21***			.000	

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

Relationship between Comprehensiveness of Strategies and Facilitation of Community
Change

The change score for Comprehensiveness of Strategies was created by subtracting Time 1 scores from Time 2 scores. The mean for the change score was -0.03 (SD = 1.21). Multiple R for the regression model predicting Time 2 Facilitation of Community Change using only the covariates was statistically significant (F (5, 263) = 4.55, p < .01), predicting 8% of the variance in Time 2 Comprehensiveness of Strategies. The addition

of the Comprehensiveness of Strategies change score improved model fit ( $R^2$  Change=.07, p<.001). Examination of the coefficient for the Comprehensiveness of Strategies change score revealed an effect ( $\beta$ =.27, t(262) = 4.68, p=.001), indicating that higher scores differences in Time 1 and Time 2 comprehensiveness of strategies was associated with greater facilitation of community change (Table 57).

Table 57. Change in Comprehensiveness of Strategies Facilitation of Community Change

		Mo	odel 1		Model 2			
Variable	В	SE B	β	р	В	SE B	β	р
(Constant)	65	.19		.001	62	.18		.001
Budget \$100,000- \$199,999 vs. Less than \$100,000	.32	.14	0.15*	.028	.17	.14	0.08	.221
Budget \$200,000 and above vs. Less than \$100,000	.20	.16	0.09	.210	.13	.16	0.05	.423
1-2 staff vs. no staff	.46	.20	0.23*	.023	.50	.20	0.25*	.010
3-5 staff vs. no staff	.80	.23	0.33**	.001	.86	.22	0.36***	.000
6 or more staff vs. no staff	.62	.27	0.18*	.022	.68	.26	0.20**	.009
Change in Internal Functioning					.23	.05	0.27***	.000
$R^2$	0.08				0.15			
F for change in $R^2$	4.55**			.001	22.14***			.000

<sup>\*</sup> P < .05; \*\* P < .01, \*\*\* P < .001

#### **CHAPTER 5: DISCUSSION**

This study sought to contribute to the existing research on how training can improve anti-drug coalition capacity to be effective community change agents for population-level reductions in substance abuse outcomes. This study examined whether a coalition's capacity for community problem solving increased with exposure to training. By building a coalition's community problem solving capacity, coalitions have the tools, skills and knowledge to put into action key processes that can guide them toward distal population-level health outcomes (Collie-Akers et al., 2007; Fawcett et al., 2001; Lasker & Weiss, 2003; Roussos & Fawcett, 2000). Furthermore, from a practical perspective, training can target development of a coalition's capacity to be an effective community problem solver. The impact of training on three elements of coalition capacity for community problem solving was examined in this study: coalition internal functioning, comprehensiveness of strategies and facilitation of community changes. Training provided by CADCA to coalitions targets improvements in each of these areas, and this study focused on determining if improvements in community problem solving capacity were related to greater exposure to training.

### **Key Findings**

Overall, findings suggest that training, in general, is beneficial to coalitions.

Specifically, coalitions that have received training have higher levels of coalition internal functioning, the first element of CADCA's framework for community problem solving, than those that have not received training. However, increased training participation does not appear to lead to higher levels of community problem solving capacity. The dose-response relationship for training and coalition outcomes was not strongly supported in

this study, and in general, coalitions did not accrue any additional benefit by exposure to more training. Training's overall link to improving coalition effectiveness in this model appears to be complex and multi-faceted. Additional factors, including technical assistance and transfer of learning were examined. Coalitions that have received technical assistance in the last year also have higher levels of coalition internal functioning when compared to those that have not received TA in the same time frame. Furthermore, it appears that while coalitions benefit from training and TA, they are most helpful when implemented in an environment that supports the transfer of learning within the coalition work context. Training, technical assistance and transfer of learning all appear to be important elements in understanding how supports to coalitions can be used to improve their capacity in coalition internal functioning, comprehensiveness of strategies and facilitation of community change.

Training Impacts on Coalition Capacity for Community Problem Solving

The first research question examined if training improved coalition capacity for community problem solving using bivariate and multivariate analyses. First, independent t-tests were conducted to examine potential mean differences in the dependent variables between trained and untrained coalitions at pre-test. This was done to better describe the sub-samples and rule out a potential confounding factor that coalitions with higher capacities in community problem solving were also those that sought out training. There was no such confound; at pre-test, both the trained and untrained coalitions were not significantly different in Coalition Internal Functioning and Comprehensiveness of Strategies.

Hierarchical multiple regressions were conducted to determine if coalition training status (trained and not trained) predicted each of the three post-test outcome measures after controlling for pre-test levels and covariates of size, budget and DFC funding. There were differences in Time 2 Coalition Internal Functioning between the trained versus untrained coalitions, with the trained group having higher scores. Even after covarying out Time 1 Scores and coalition staff size, the differences were significant, indicating that coalitions experienced benefits in their coalition internal functioning (i.e., essential process usage, product use and quality, quality of membership and climate for collaboration) when they received training from CADCA.

But how do these coalitions benefit from training? Initial analysis indicated that the trained and untrained groups were similar in their pre-test levels of coalition internal functioning at Time 1. However, at post-test, while those untrained were actually doing significantly poorer in Coalition Internal Functioning than those that had received training, the trained coalitions did not experience improvements in their coalition internal functioning from Time 1 to Time 2. Paired t-test analysis indicated that the trained coalitions had the same Internal Functioning scores at pre and post test. This indicated that the untrained group must have dropped in their Coalition Internal Functioning from Time 1 to Time 2. However, paired t-tests indicated that while the untrained coalition group did have lower scores at Time 2, this drop was not statistically significant.

This finding is intriguing. While coalitions in this study came in with similar levels of internal functioning, they may have had enough to start them on a road toward being a better community problem solver. It may be that training acts as a potential buffering agent in helping coalitions maintain their coalition internal functioning over

time. In other words, training may have an "inoculation" effect that protects coalitions from other factors that may reduce their ability to be successful (e.g., changing funding environment). This may allow coalitions enough time to work toward implementing comprehensive strategies. Further follow-up is needed to determine if the decrease in coalition internal functioning in the untrained groups continues overtime. If this is the case, then the untrained group may be slowly spiraling downward to the point of ineffectiveness.

Group differences between the trained and untrained coalitions in the covariates of budget, DFC funding status and staffing also indicate that in general, the untrained coalitions have smaller budgets and fewer individuals working for the coalition, and few have a Drug-Free Communities grant. This may result in fewer resources to invest into training in comparison to their trained counterparts. Additionally, with less full-time staff, these coalitions may not be able to spare anyone to send to training because of person-power issues. The untrained coalitions also perceive themselves to be less mature at post-test than the trained coalitions, giving further evidence that the lack of training may hurt these coalitions over time. While trained and untrained coalitions have similar levels of initial coalition internal functioning, funding and staffing factors may impede untrained coalitions from accessing training, which may result in decreased internal functioning over time.

Training status did not predict any of the other two elements of community problem solving: comprehensiveness of strategies and facilitation of community change.

This examination suggests that training in and of itself is not sufficient to improve a coalition's use of comprehensiveness of strategies to address substance abuse or the

degree to which they help to bring about needed programs, policies and changes within the community. While training is frequently used to support coalitions in their development, (Florin, Mitchell & Stevenson, 1993; Quinby et al., 2008) and is considered to be a key factor in their ability to achieve targeted goals and outcomes (Roussos & Fawcett, 2000), the current study appears to suggest that training has very focused impact. While coalitions benefited from training in this study, the benefit was concentrated to coalition internal functioning. The implications for training suggest that training should be applied strategically.

It should be noted that coalition internal functioning is the first step in CADCA's model of change. The training included in this study primarily emphasized improving a coalition's internal functioning, such as the development of quality planning products and use of essential processes. The link between coalition training and coalition internal functioning is consistent with other studies (Butterfoss, 2004; Butterfoss, Morrow, Webster & Crews, 2003; Stevens & Lodl, 1999). Butterfoss's (2004) study of coalition training and TA for regional councils focused on improving perinatal health showed that training and TA were successful at improving a coalition's processes (e.g., coalition decision-making, member recruitment) and structures (e.g., strategic plans). The Communities That Care (CTC) study of training attendance found a positive relationship between training attendance and coalition internal functioning, including clarity of initiative goals, number of organizations working with the CTC initiative and stronger board structure. However, there was no link between training attendance and perceived efficacy of the CTC initiative. While the CTC logic model proposes that CTC training impacts coalition functioning and this leads to higher project efficacy, that study was only able to make the link of training to the first element of their logic model (Feinberg et al., 2002). So this current study's findings are consistent with other coalition training studies. It may be that coalition training is best suited to building or maintaining a coalition's internal functioning, which is an earlier (if not the first) element of many coalition building models (Butterfoss & Kegler, 2002 as cited in Butterfoss, 2007; Feinberg et al., 2002; Roussos & Fawcett, 2000).

Dose-Response Relationship for Training and Community Problem Solving Capacity

The second and third research questions in this study delved more carefully into how training involvement can impact coalitions, examining the degree of exposure coalitions have had to training and how varying levels of exposure were associated with varying coalition outcomes. Studies on prevention programs and out-of-school time activities suggest that one reason why interventions have null findings is that degree of exposure to the intervention has not been taken into account (August et al., 2004; Charlebois et al., 2004; Rescinow et al., 2001). Training effects may be masked by not taking into account how much training the coalition has received. This study applied dose-response theory to coalition training to better understand this relationship.

Framing training from a dosage perspective has not been tested extensively in prior research and so this study required an examination of testing various types of training dosage and also determining the nature of the relationship between each training dosage measure and coalition outcome (e.g., linear). For this study, three types of dosage were examined: training breadth (number of unique individuals trained), training frequency (number of individuals attending more than one training), and training intensity (average number of coalition members attending each training).

One of the key foci of this study was to understand how the dose-response relationship for coalition training and coalition outcomes should be defined. Research Question 2 examined each training dosage's unique relationship to each of the three dependent variables. Scatterplots of each dosage measure and each Time 2 dependent variable score were examined. Lines of best fit for linear, curvilinear and cubic trends were examined but none were statistically significant. Examination of the lowess smoothing line indicated that a linear relationship best fit the data. However, the slopes were relatively flat for each dose/outcome plot, suggesting a weak relationship between training dosage and each of the three elements of capacity for community problem solving of interest in this study.

Other studies in other fields such as out-of-school time programs and psychotherapy have the strongest evidence of a linear relationship between intervention dosage and outcomes (Anderson-Butcher et al., 2003; August et al., 2004; Chaput et al., 2004; Youniss, McLellan, Su & Yates, 1999). This study provided some weak support for a linear relationship between coalition training dosage and outcomes. It may be that the range restrictions in the data prohibited a full examination of this relationship. Most coalitions were in the lower levels of dosage in all three areas of breadth, frequency and intensity and this may have reduced the ability to fully investigate the nature of the relationship among the study variables.

While a threshold effect was not examined in this study because of the limited range in the IVs, future studies of training dosage may benefit from this direction of inquiry. While the out-of-school time studies offer some examples in which a threshold model explained the dose-response relationship for program involvement and program

outcomes (Chaput et al., 2004), there is still much more work that needs to be conducted in this arena. The time frame of training dosage follow-up studies may need to be expanded to fully examine the specific nature of the dose-response relationship for each dosage type and each outcome variable.

Research Question 3 focused on determining which type of training dosage received was the strongest predictor of each element of community problem solving capacity. Hierarchical multiple regressions were used and pre-test scores, staff, budget and DFC funding status were covaried out. While the overall models were significant, none of the dosage measures was a significant predictor of coalition outcomes. Further examination of the dose response relationship for training investigated if outcomes varied as a result of high or low dosage. Coalitions were grouped into quartiles for each dosage type and then the highest and lowest quartiles were used to predict each of the three elements of community problem solving. Here, there appears to be benefit at the highest levels of training frequency - those coalitions who had two or more individuals attending more than one CADCA training appeared to have higher levels of coalition internal functioning than those coalitions who were not able to send any individuals to additional training. This finding suggests that training frequency operationalized as the number of individuals attending additional training may be a potentially useful way to examine dosage. However, there may be a threshold effect in place, with a significant amount of training frequency needed to benefit from additional exposure of this type. Again, additional research is needed to further understand how training frequency may benefit a coalition.

Two exploratory analyses were conducted to examine a potential interaction

effect for training breadth and frequency and for the moderating effect of coalition age on the relationship between training dosage and outcomes. Proposition One that coalitions would have stronger outcomes when there was both high training breadth and training frequency was not substantiated. There was no significant interaction between training breadth and frequency and having high levels of both dosage types did not benefit the coalition in any of the outcome variables. While there is some limited evidence that dosage is better conceptualized as a multi-faceted construct and the dose-response relationship is strengthened by examining the interaction between dosage types (Welsh et al., 2002), this finding was not supported by this study. However, given the weak evidence of a dose-response relationship in this study, the lack of support for Proposition One is not surprising. Future research should examine other types of dosage and their interactions with each other to fully investigate a potential interaction between dosage measures.

Proposition Two was also not substantiated; coalition age was not a moderator of the relationship between training dosage and coalition capacity for community problem solving. The amount of training a coalition receives does not appear to be a function of how old the coalition is. In addition, coalition age by itself is not a significant predictor of any of the elements of coalition capacity for community problem solving. This aligns with the CADCA Institute's evaluation findings that indicated the community problem solving framework was consistent for both young and old coalitions (Foster-Fishman et al., 2008). The CADCA Institute has never promoted a "stages of development" model in their work with coalitions, and this finding gives support to their view that capacity for community problem solving has nothing to do with how young or old a coalition is. This

implies that coalitions at any age may potentially benefit from becoming an effective community problem solver.

In sum, there was some evidence of a relationship between training frequency and coalition internal functioning, and coalitions seems to benefit from training but this appears limited to only their internal functioning. Additionally, all of the regression models predicting coalition outcomes with covariates were significant, but most interestingly, Time 1 scores on Internal Functioning and Comprehensiveness of Strategies always accounted for the most variance in the model. These findings suggest that where coalitions are at Time 1 is the biggest predictor of where they will be at Time 2.

It appears then, that the relationship between training and coalition outcomes is a complex phenomenon, requiring additional scrutiny into other variables that may play a role in improving a coalition's capacity for community problem solving. For this reason, additional analyses were conducted to examine the role technical assistance and transfer of learning played in building coalition capacity for community problem solving.

Technical Assistance and Community Problem Solving Capacity

Examination of the impact of technical assistance shows a similar story to that of coalition training. Technical assistance has been found to be a critical factor in coalition success (Florin et al., 1993). The Institute's own external evaluation found that technical assistance was an important trigger for coalition use of the community problem solving model (Foster-Fishman et al., 2008). In this study, coalitions who reported receiving TA in the last 12 months were compared to those who reported they had not received TA. Those who had received TA had higher levels of coalition internal functioning at Time 2

than those who had not received TA. Results of regression analyses also indicated that TA status was a significant predictor of Time 2 internal functioning, even after covariates had been controlled for. These results suggest that technical assistance also plays a role in helping a coalition develop its internal coalition capacity. However, similar to the findings for training status, receiving TA in the last 12 months was not associated with comprehensiveness of strategies or facilitation of community change. This corroborates other training and TA studies that found TA beneficial to helping coalitions develop aspects of their internal functioning (Butterfoss, 2004; Butterfoss et al., 2003). As with training, CADCA's technical assistance may best be suited to help a coalition build its internal functioning.

CADCA Touch and Capacity for Community Problem Solving

Further analyses were conducted to examine if and how the combination of training and technical assistance improves coalition capacity for community problem solving. The dissection of the interplay between technical assistance and training indicated that those coalitions who had been trained or trained and also received technical assistance had higher levels of post-test internal functioning than those who had not received any CADCA touch. In addition, the biggest mean score differences in Time 2 Internal Functioning were between the no training/ta group and the group that had received both training and TA. In this case, it appears that while receiving training and technical assistance individually resulted in higher levels of internal functioning when compared to receiving nothing at all, the best outcomes were experienced by coalitions that had received both training and technical assistance.

As was found for the analyses examining the impact of training status, the No

Touch group did not experience significant decreases from pre- to post-test in Coalition Internal Functioning and the Both Training/TA group did not experience significant increases from Time 1 to Time 2. Again, this may mean that coalitions who have received Training and TA have been adequately inoculated so that they are able to maintain a level of coalition internal functioning that helps them keep up with work sufficiently to the point in which they are able to implement a comprehensive set of strategies. Follow-up studies are needed to determine if the pattern of change from pre to post test experienced by the No Touch and Training/TA group continues to the point where significant differences between Time 1 and Time 2 are observed. It may be that the No Touch group experiences further decreases over time that makes these coalitions unlikely to carry out strategies to effectively address their targeted substance abuse problems while the Training/TA group grows in internal functioning over time to support their ability to implement a comprehensive set of strategies targeting their local substance abuse problems.

Varying levels of CADCA touch were not related to comprehensiveness of strategies. Comparison of those that have not received any CADCA Touch, received only training, received only TA, and received both training and TA indicated no differences in these groups in post-test comprehensiveness of strategies.

Interestingly, higher levels of facilitation of community change were associated with coalitions that had received only training or only technical assistance when compared to coalitions that had not received any training or TA. There were no differences between the coalitions that had received both training and TA with those that had received nothing. Here, there appears to be no added benefit for receiving both

training and TA to improve a coalition's involvement in community change. However, it should be noted that since Time 1 scores were not measured for facilitating community change, it may be, based on all the other analyses, that if Time 1 scores had been covaried out, the effect for training and technical assistance would have been null.

It appears then, that the strongest link between CADCA touch and coalition capacity for community problem solving is in coalition internal functioning.

Examination of the Institute's theory of change depicted in Figure 1 may explain these findings. The Institute's theory of change for effective community problem solving proposes a model by which strong internal functioning leads to coalitions pursuing a comprehensive set of strategies and interventions, which leads to facilitating needed community changes, which then contributes to the coalition's ability to achieve population level substance abuse decreases. Examination of the relationship between the boxes in Figure 1 does indicate that facilitation of community changes is predicted by greater change between Time 1 and Time 2 comprehensiveness of coalition strategies. In addition, higher levels of comprehensives of strategies is associated with greater increases between Time 1 and Time 2 coalition internal functioning. This study supports the Institute's theory of change.

Additionally, the strongest impact of CADCA "touch" appears to be in coalition internal functioning, the first box in the theory of change used by CADCA. As discussed earlier, here the coalitions who had received both training and technical assistance were ones that had the highest levels of coalition internal functioning, when compared to the no training/technical assistance group. While CADCA training and TA are designed to impact each element of community problem solving, the training curriculum does

emphasize product development and use of the essential processes. Additionally, CADCA believes these to be key precursor actions that need to be taken by a coalition in order for it to become comprehensive, facilitate community change and contribute to distal outcomes. This finding for internal functioning supports previous Institute evaluation findings that suggested both training and TA trigger the process of change (Foster-Fishman, Law & Ahn, 2008). In that study, training and technical assistance were both needed to set the chain of events in motion. Additionally, training and TA had a direct impact only on coalition internal functioning and not on the other boxes in the model. This study corroborates that finding but also controls for where coalitions are at pre-test, suggesting that while both training and TA by themselves are beneficial, the strongest outcomes are experienced when training and TA are combined.

Implications for Coalition Training and Technical Assistance

One potential interpretation of these findings may be that the most appropriate role for training and technical assistance is to trigger the theory of change process by maintaining or building a strong internal capacity that will then help the coalition gain momentum and move along the pathway, step by step, toward population level reductions in targeted substance outcomes. The lack of a consistent relationship between training and/or TA with other targeted outcomes of comprehensiveness of strategies and facilitation of community change may indicate that it is not training or technical assistance that improves capacity in these areas. The theory of change indicates that the subsequent element of problem solving capacity is the key predictor of improvements. In fact, the findings from this study suggest that training and technical assistance play a critical role in developing capacity in the first element. It corroborates early CADCA

evaluation findings in that training and TA trigger the framework of change (Foster-Fishman et al., 2008).

Additionally, transfer of learning appears to be a critical aspect of training use that makes it more likely for coalitions to benefit from training. Training researchers have posited that being trained, in and of itself, is not likely to bring about targeted improvements (Baldwin & Ford, 1988; Rhodes et al., 2008). The training information must be implemented and sustained within the organization setting to bring about organization-wide changes. Successful transfer of learning is a function of trainee-level characteristics, how training itself is designed, and factors in the work environment itself (Baldwin & Ford, 1988).

Examination of the transfer phenomenon was conducted in this study by examining the work environment's climate for transfer of learning, which included the degree to while coalitions reported using and sharing training/TA information. Other studies have found that organizations that developed a climate in their work environment supporting transfer of skills and knowledge from training were more likely to see implementation of training lessons in the organization (Burke & Baldwin, 1999; Saks & Belcourt, 2006). The current study supported previous studies in that there were significant associations for learning transfer and coalition outcomes. Specifically, greater internal functioning, comprehensiveness of strategies and facilitation of community change among the 182 trained coalitions were associated with transfer of CADCA training, technical assistance and publication information within the last 12 months. It appears that the intake and use of CADCA materials is a critical factor in predicting coalition outcomes. This was, by far, the only predictor that was able to account for a

significant amount of variance in all three of the dependent variables.

Additionally, the highest amounts of transfer occurred in coalitions that had received both training and TA, suggesting that these might complement each other in helping acquired skills and knowledge to be used in the coalition. This finding is significant because while we know that transfer of training is not always successful (Baldwin & Ford, 1988; Rhodes et al., 2008), it does appear to be occurring with the coalitions in this study, especially those who have received both Training and TA.

One potential reason for the strength of this relationship may be because many individuals trained by CADCA appear to be coalition leaders. While this information is not tracked consistently in CADCA's training attendance records, examination of results from the evaluation of one of CADCA's major training events, its 2009 Mid-Year Training Institute, indicates that most attendees are coalition leaders. 37% of evaluation respondents (n=394) indicated they were coalition directors. While the evaluation had a response rate of 33%, this does give one indication that the individuals making the decisions for the coalition are a large proportion of the training audience. Studies of organization learning climate indicate that supervisor and management support of training and learning transfer are key elements to building an environment supporting learning (McHargue, 2003; Saks & Belcourt, 2006). Coalitions in this study appear to be very successful at the often elusive transfer of learning. This may be due to the buy-in to training and implementation of CADCA's theory of change within the coalition work environment that results from coalition leaders being involved in training themselves. They may be helping to foster the sharing of training information and building of systems and processes so that training lessons are transferred and used in the day-to-day work of

coalitions.

It should be noted that training in this study was measured starting at baseline. However, the TA measured here only reflects back on the past 12 months. Another potential explanation for the transfer and CADCA touch findings may be that technical assistance is the vehicle through which transfer occurs. This may suggest that technical assistance can help with the transfer of knowledge and skills learned in training and coalitions, regardless of when they have been trained, benefit from ongoing technical assistance. While training may trigger the framework of change used by the CADCA Institute, it is only successful within the context of transfer and transfer must happen continuously through technical assistance.

In summary, the weak link between training dosage and coalition outcomes may suggest that multiple exposures to training may not accrue any additional benefit for the coalition or additional benefit from training only come at extremely highly levels of exposure. In this study a single exposure appears to be sufficient to start the process of change, especially if technical assistance is combined with training. It is possible that CADCA training may be of sufficient quality and scope that attending a single training or sending a single individual to training is enough to trigger the process toward being a strong community problem solver.

However, the positive finding for the top quartile for training frequency requires further investigation to examine the relationship between training dosage and coalition outcomes. There is some suggestion with this finding that some benefits do accrue for those coalitions that send individuals to additional trainings, but this benefit is only experienced at the highest end of exposure. Given the time frame for this study, it may

be that more time is needed to examine this phenomenon more accurately, especially given range restrictions in the independent variables. Additionally, given the weak linear relationship between training dosage and outcomes and nonsignificant results for a quadratic or cubic relationship, there may be a threshold effect in place; however, the range of training dosage in this study did not lend itself to examining this relationship more fully.

In addition, it is possible that the types of dosage examined in this study may not be the most relevant for training. The number of individuals trained, number of individuals attending more than one training and average attendance at training provided a first examination of the dose-response relationship for training and coalition outcomes. There may be other dosage measures that may have more relevance. For example, another conceptualization of training intensity may be the number of times more than one person is sent to a training, rather than average attendance. This and other training dosage measures should be examined in additional studies.

Another possible explanation for the lack of findings for dosage is that exposure to other trainings, such as CTC training and training provided by state or regional-level prevention providers, can not be controlled for. It is unrealistic to think that CADCA is the only source of training accessed by these coalitions. Additionally, other entities provide technical assistance services to coalitions. How all these support or contradict the training and TA provided by CADCA is unknown. Regardless of the inability to control for "Other Touch," coalitions do appear to benefit from the training and technical assistance they receive from CADCA. However, more research to delve systematically into all the dosage of support received by a coalition is needed to better understand the

dose-response relationship for training and coalition effectiveness.

Finally, it seems that transfer of learning is a critical element in predicting how coalitions may benefit from training. The scope of this study did not include an examination of what percent of individuals first trained were still with the coalition presently. Additional investigation into longevity of trained staff/members may provide further insight into how widespread training information is used and shared within the coalition and with the larger community and how long the training effects last if there is little turnover among staff that receive training.

## Study Strength and Limitations

This study has several strengths. First, it offers an examination of a large and diverse sample of substance abuse coalitions in this country. Rarely do coalition studies have sample sizes as large as 269 groups. While it is impossible to determine the representativeness of this non-random sample, the sample represents a wide range of coalition budgets, age, staffing and geographic target areas.

Additionally, use of an extensive database of coalition training attendance records offered an opportunity to examine multiple ways to conceptualize training dosage. Also, CADCA's Annual Survey of Coalitions offered a way to examine various elements of coalition capacity for problem solving across hundreds of coalitions.

This study does have a few limitations that should be stated. Because secondary data were used, the research questions were constrained by the data available. For example, while examining training dosage based on training topic or type of individual trained would be a valuable investigation, CADCA training records do not allow a fully accurate assessment of this type of dosage. Additionally, while using training attendance

records is suggested as a better way to calculate attendance dose than self-report of receipt of training (McCall, Ryan, & Plemons, 2003), there may be error in these records, with individuals either not signing in or signing in and leaving mid-training. No other study of coalition training has compiled such an extensive training attendance history (Feinberg et al., 2002; Quinby et al., 2008); however, this system is not without its faults.

Another limitation is that this study only covered a two-year period of time for half the sample of coalitions, and there is the possibility that additional time is needed for coalitions to fully benefit from training. For example, it may take more than two years for a coalition to facilitate a policy change. While, other studies have examined coalition outcomes in a similar timeframe and suggest that 48 months is sufficient time for coalitions to bring about important improvements in the coalition and the community (Guide to Community Preventive Services, 2001), more time may be needed to examine this phenomenon fully. Given the ambitious nature of coalitions and the outcomes they are targeting, changing long embedded community health conditions may take longer than just a couple of years (Roussos & Fawcett, 2002).

Conclusions and Recommendations for Future Research

The dosage measures examined in this study offered a first, comprehensive examination of the dose-response relationship for training and coalition capacity for community problem solving. For the most part, the dosage types selected for study here do not seem to be related to community problem solving capacity; however, it does appear that training and technical assistance in general are critical ingredients in fostering strong coalition internal functioning that can then trigger a process by which coalitions can become comprehensive in the strategies they implement, facilitate needed community

changed and contribute to population-level reductions in substance abuse problems.

Future studies should examine other types of training dosage and also attempt to capture the dose-response relationship for technical assistance and coalition outcomes.

This study shows that training and technical assistance can impact coalition internal functioning, and the best benefits may accrue when both are combined. Further inquiry is needed to determine the best combination and timing of training, technical assistance and other supports for coalitions.

In addition, dose quality may be another critical factor for training dosage that should be examined. Bickman, Andrade and Lambert in their 2002 study of doseresponse for child and adolescent participants in mental health services suggest that one reason they may not have found a dose-response relationship may be because they did not measure the quality of the dose. When calculating the dosage score, the researchers considered all mental health service contacts to be equal; however, a home visit is qualitatively different and may carry a different "weighted" effect than a case management contact. This potential measurement problem may be one reason why the study failed to show an effect and points to the need to better understand what might be more "important" aspects of participation than others.

Research on intervention implementation fidelity also suggests that it is important to assess if an intervention has been implemented with the desired level of quality (Charlebois et al., 2004; Dane & Schneider, 1998). Charlebois and colleagues (2004) used observations and reports by trainers to assess if their program to reduce disruptive behavior was implemented with integrity. Their study, while looking at attendance and its relationship to program outcomes, also confirmed that the desired quality of the

program had been implemented, making a stronger case for the effectiveness of the program. Future research should examine if training is implemented with quality, including if trainers are providing training according to pre-defined guidelines and if quality of the trainer has differential impacts on outcomes.

Further studies are required to determine how to best build coalition capacity to be strong community problem solvers. While CADCA's community problem solving model appears to offer a strong theory of change for coalitions to achieve large-scale decreases in substance abuse rates in their community, the process by which a community problem solving framework is triggered requires additional investigation. While training and technical assistance seem to play a role in launching a coalition in the right direction, more research is needed to understand the best combination and timing of training, technical assistance and other supports to achieve optimal results. Coalitions appear to be on the right path if they move along the community problem solving road and future studies will need to examine if the road leads to the ultimate destination of populationlevel outcomes. What role training and dosage may play in this is not yet fully understood and efforts need to be made to build a greater understanding of the process by which community problem solving capacity is developed. The benefits of this knowledge have broad impact: assisting the coalitions doing the work in their communities, the intermediaries that provide training and supports to coalitions, and the researchers who develop and study the best supports to help coalitions achieve their goals.

**APPENDICES** 

## APPENDIX A

## Variable Comparison between 2005/2006 and 2008 Surveys

Table A. Variable Comparison for Time 1 and Time 2

		P (F)			D		
		Pre-Tes	st	Post-Test			
Construct	2005/2006 Survey Item #	# of Items	Scale	2008 Survey Item #	# of Items	Scale	
Essential Processes							
Assessing community needs and resources	#20 / #21	2	Average # of activities used	#34	7	Average # of activities used	
Analyzing information about the problem or goal	#20 / #21	1	Average # of activities used	#34	4	Average # of activities used	
Developing a framework of change	#20 / #21	1	Average # of activities used	#34	4	Average # of activities used	
Developing and using strategic and action plans	#27-29 / #28-30	3	Average # of activities used	#34	3	Average # of activities used	
Identifying, adapting and implementing interventions	#20 / #21	2	Average # of activities used	#34	5	Average # of activities used	
Evaluating the coalition	#20 / #21	7	Average # of activities used	#34	12	Average # of activities used	
Sustaining projects and initiatives	#20 / #21	1	Average # of activities used	#34	7	Average # of activities used	
Planning Products							
Develop/Revise Products - Total number of products developed	Not used			#36		Continuous (0-5)	
Quality of Products - Average product quality	Not used			#38		Continuous	
Use Products - Average product use	Not used			#35		Continuous	
Membership Involvement							
Quality of Membership – Proportion of active coalition members	#3	40	Continuous (0-40 sectors)	#3	43	(0-43 sectors)	
Collaborative Capacity	Not used			#9	5	Continuous	

		<del>~</del>	NESS OF STRA	TEGIES		
Construct	Survey Item #	# of Items	Scale	Survey Item #	# of Items	Scale
Average involvement in programmatic change strategies	#15		Average of program items	#15		Average o program items
Average involvement in environmental change strategies	#15		Average of environment al items	#15		Average of environmental items
Total Program Strategy	#15		Continuous (0-3)	#15		Continuou (0-3)
Total Environmental Strategy	#15		Continuous (0-3)	#15		Continuou (0-4)
F	ACILITATIO	ON OF C	COMMUNITY O	CHANGES		
Construct	Survey Item #	# of Items	Scale	Survey Item #	# of Items	Scale
New/modified program change New/modified policy/practice change	Not used			#40 #44		Categorica (yes/no) Categorica (yes/no)
Expanded circle of influence with program changes Expanded circle of influence with policy/practice changes	Not used			#42 #46		Continuou (0-11) Continuou (0-11)
Expanded targets of program change Expanded targets of policy/practice changes	Not used			#43 #47		Continuou (0-5) Continuou (0-5)
Changes fit mission of coalition	Not used			#48-50	3	Continuo
Changes are strategic	Not used			#48-50	3	Continuou (0-3)

(0-3)

Tables B-C: Descriptive and Bivariate Statistics

Table B. Descriptive Statistics for Categorical Variables (Total Sample)

Variable	Response	% (n)
Facilitation of Community Change		
(Time 2 Only)		
•	Program Change - Yes	71 (191)
	Policy/Practice Change - Yes	60 (162)
Budget	•	
<u>-</u>	Less than \$100,000	38 (103)
	\$100,000 to \$199,999	35 (94)
	\$200,000 and above	27 (72)
Number of Full-Time Equivalent		
Staff		
	None	11 (29)
	Fewer than 3	56 (150)
	3-5	23 (63)
	More than 6	10 (27)
DFC Grantee Status		
	Yes	71 (190)
	No	29 (79)

Table C. Descriptive Statistics of Scales and Continuous Items (Total Sample)

		TIME 1			TIME 2	
Dimensions	M (SD)	Range of Scores	Possible Range	M (SD)	Range of Scores	Possible Range
	COA	ALITION INTI	ERNAL FUN	CTIONING		
Essential Processes						
Assessing community needs and resources	.82 (0.31)	0-1	0-1	.89 (0.20)	0-1	0-1
Analyzing information about the problem or goal	.86 (0.34)	0-1	0-1	.90 (0.22)	0-1	0-1
Developing a framework of change	.83 (0.40)	0-1	0-1	.89 (0.27)	0-1	0-1
Developing and using strategic and action plans	.73 (0.42)	0-1	0-1	.92 (0.22)	0-1	0-1
Identifying, adapting and implementing interventions	.71 (0.35)	0-1	0-1	.91 (0.22)	0-1	0-1
Evaluating the coalition	.61 (0.35)	0-1	0-1	.83 (0.26)	0-1	0-1
Sustaining projects and initiatives	.80 (0.40)	0-1	0-1	.84 (0.25)	0-1	0-1
Planning Products Develop/Revise				<del></del>		
Products - Total number of products developed	Not used			3.20 (1.71)	0-5	0-5
Quality of Products - Average product quality	Not used			3.20 (1.03)	0-4	0-4
Use Products - Average product use	Not used			3.64 (1.09)	0-5	0-5
Membership Involvement						
Quality of Membership – Proportion of active coalition members	.61 (0.28)	0-1	0-1	.82 (0.14)	.26 - 1	0-1
Collaborative Capacity						
Average collaboration score	Not used			3.43 (0.45)	1-4	1-4

Table C (cont'd)
------------------

Table C (cont d).	COMP	REHENSIV	ENESS OF S	TRATEGIES			
Average involvement in programmatic change strategies	3.28 (0.72)	1.33-4	0-3.67	3.45 (0.56)	1.33-4	1-4	
Average involvement in environmental change strategies	2.59 (1.15)	0-4	0-4.33	2.49 (0.73)	1-4	1-4	
Total Program Strategy	2.94 (0.25)	0-3	1-3	2.90 (0.35)	1-3	0-3	
Total Environmental Strategy	2.68 (0.64)	0-3	0-3	3.20 (1.10)	0-4	0-4	
ACCOMPLISHING COMMUNITY/SYSTEMS CHANGES							
Expanded circle of influence with program changes	Not used			2.50 (2.43)	0-11	0-11	
Expanded circle of influence with policy/practice changes	Not used			1.85 (2.33)	0-11	0-11	
Expanded targets of program change	Not used			1.99 (1.69)	0-5	0-5	
Expanded targets of policy/practice changes	Not used			1.66 (1.82)	0-5	0-5	
Changes fit mission of coalition	Not used			2.91 (1.47)	0-4	0-4	
Changes are strategic	Not used			2.42 (1.18)	0-4	0-4	
		OTHER	R VARIABLE	S			
Age				11.02 (6.45) (n=252)	0+	0-37	
Transfer	Not used			3.22 (0.58)	1-4	1-4	

Table D. Correlation Matrix of IVs, Transfer of Learning and DVs (Dosage Sub-Sample)

_	mple)	1	2	3	4	5	6	7	8	9
1.	Training Breadth									
2.	Training Frequency	.61*								
3.	Training Intensity	.61*	.22*							
4.	Coalition Internal Functioning Time 1	.08	.06	.10						
5.	Comprehensiveness of Strategies Time 1	.03	.01	02	.22*					
6.	Coalition Internal Functioning Time 2	.03	.14	03	.28*	.18**				
7.	Comprehensiveness of Strategies Time 2	.06	.08	.05	.24*	.29*	.54*			
8.	Facilitation of Community Change Time 2	02	03	.00	.18**	.15**	.44*	.47*		
9.	Transfer of Learning	.08	.16**	.03	.13	.04	.37*	.33*	.18**	

<sup>\*</sup> P < .01; \*\* P < .05.

Tables E-K. Results from Principal Components Analysis

Table E. Total Variance Explained for Time 1 Coalition Internal Functioning Principal Component Analysis

_	I	nitial Eigenval	ues	Extraction Sums of Squared Loadings		
Component		% of			% of	
	Total	Variance	Cumulative %	Total	Variance	Cumulative %
1	3.21	40.14	40.14	3.21	40.14	40.14
2	0.93	11.66	51.80			
3	0.83	10.34	62.13			
4	0.78	9.79	71.93			
5	0.71	8.89	80.82			
6	0.62	7.76	88.58			
7	0.54	6.76	95.34			
8	0.37	4.66	100.00			

Table F. Total Variance Explained for Time 2 Coalition Internal Functioning Principal Component Analysis

	I	nitial Eigenval	ues	Extraction Sums of Squared Loadings			
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	5.68	47.31	47.31	5.68	47.31	47.31	
2	1.17	9.76	57.08	1.17	9.76	57.08	
3	1.12	9.35	66.43	1.12	9.35	66.43	
4	0.75	6.27	72.70				
5	0.61	5.07	77.77				
6	0.57	4.73	82.51				
7	0.51	4.29	86.79				
8	0.42	3.48	90.27				
9	0.36	2.99	93.26				
10	0.31	2.54	95.80				
11	0.27	2.22	98.02				
12	0.24	1.98	100.00				

Table G. Total Variance Explained for Time 1 Comprehensiveness of Strategies Principal Component Analysis

_	I	nitial Eigenval	ues	Extraction Sums of Squared Loadings			
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	2.49	62.21	62.21	2.49	62.21	62.21	
2	0.86	21.52	83.73				
3	0.44	10.97	94.70				
4	0.21	5.30	100.00				

Table H. Total Variance Explained for Time 2 Comprehensiveness of Strategies Principal Component Analysis

	I	nitial Eigenval	ues	Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.49	62.29	62.29	2.49	62.29	62.29
2	0.92	23.09	85.37			
3	0.39	9.79	95.16			
4	0.19	4.84	100.00			

Table I. Total Variance Explained for Time 2 Facilitation of Community Change Principal Component Analysis

	I	nitial Eigenval	ues	Extraction Sums of Squared Loadings			
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	4.50	56.26	56.26	4.50	56.26	56.26	
2	1.61	20.10	76.36	1.61	20.10	76.36	
3	0.96	12.01	88.36				
4	0.28	3.55	91.91				
5	0.25	3.14	95.05				
6	0.21	2.67	97.72				
7	0.15	1.82	99.54				
8	0.04	0.46	100.00				

Table J. Component Matrix for Time 2 Coalition Internal Functioning Principal Component Analysis

_	Component		
	1	2	3
Proportion of activities coalitions were involved with in Assesses  Community Needs section	0.74	-0.21	-0.08
Proportion of activities coalitions were involved with in "Analyze problem" section	0.75	-0.14	0.06
Proportion of activities coalitions were involved with in "Developed Framework" section	0.73	-0.03	-0.01
Proportion of activities coalitions were involved with in "Develop Strategic Action Plan" section	0.78	-0.14	-0.06
Proportion of activities coalitions were involved with in "Identify adapt and implement intervention" section	0.78	-0.15	0.03
Proportion of activities coalitions were involved with in "Evaluate Coalition" section	0.82	-0.03	-0.01
Proportion of activities coalitions were involved with in "Sustain projects and initiatives" section	0.74	0.02	0.04
Total number of products coalition developed or revised in last 12 months	0.57	0.07	-0.29
Average rating of how often coalition uses all 5 products	0.76	0.16	-0.06
Average rating of the degree to which each product is comprehensive and effective	0.71	0.16	-0.14
Proportion of active coalition membership over total coalition membership	0.27	0.37	0.59
Rating of coalition climate for collaboration	0.35	0.42	0.51

Table K. Component Matrix for Time 2 Facilitation of Community Change Principal Component Analysis

_	Component		
	1	2	
Whether coalition brought about a new or modified policy or practice change	0.67	0.61	
Whether coalition brought about a new or modified program	0.78	-0.46	
Total sectors where coalition brought about policy change	0.67	0.48	
Total number of targets the coalition was trying to bring about a policy change in	0.67	0.61	
Total sectors where coalition brought about program change	0.69	-0.45	
Total number of targets the coalition was trying to bring about a program change in	0.76	-0.45	
Changes fit mission of coalition	0.87	-0.05	
0-3 rating of whether of changes the coalition has brought about in last 12 months have been strategic	0.86	-0.09	

Figures A-I. Scatterplots of Training Dosage Types and Elements of Community Problem

Solving Capacity

Figure A. Scatterplot of Training Breadth and Coalition Internal Functioning

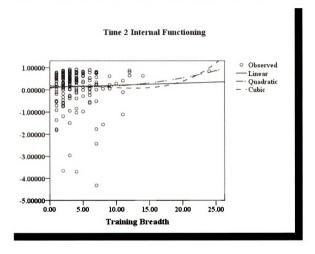


Figure B. Scatterplot of Training Frequency and Coalition Internal Functioning

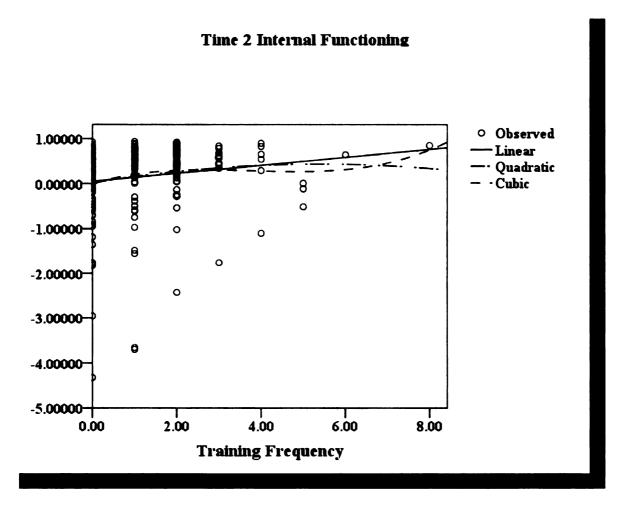


Figure C. Scatterplot of Training Intensity and Coalition Internal Functioning

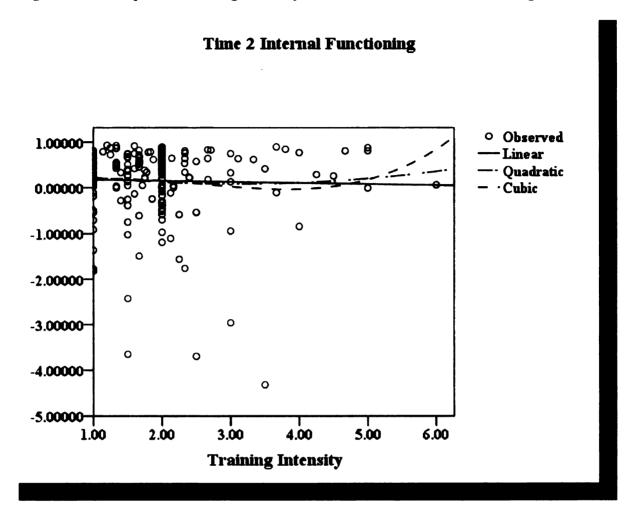


Figure D. Scatterplot of Training Breadth and Comprehensiveness of Strategies

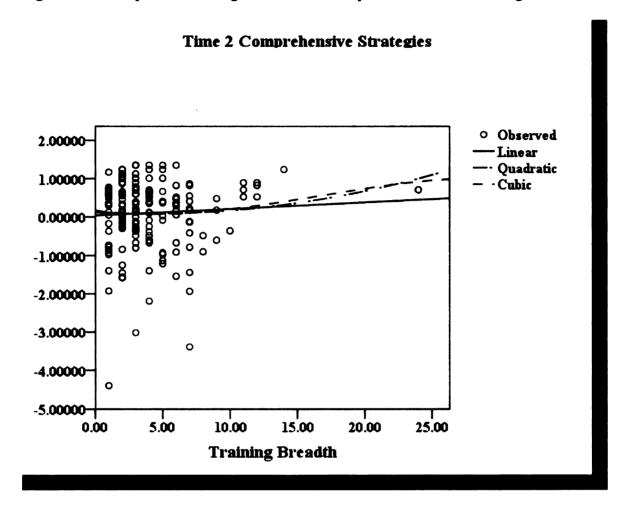


Figure E. Scatterplot of Training Frequency and Comprehensiveness of Strategies

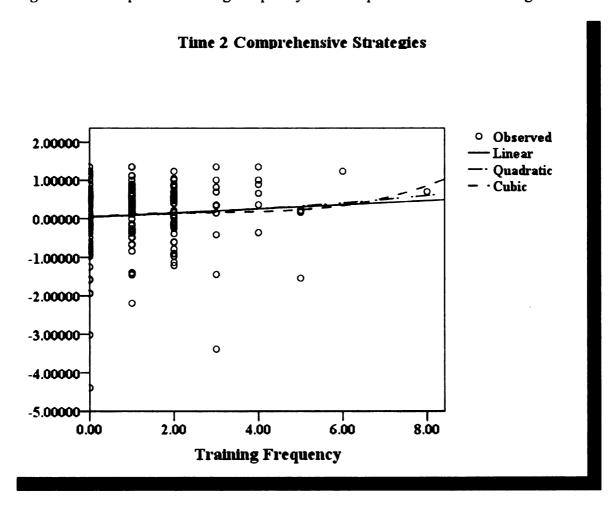


Figure F. Scatterplot of Training Intensity and Comprehensiveness of Strategies

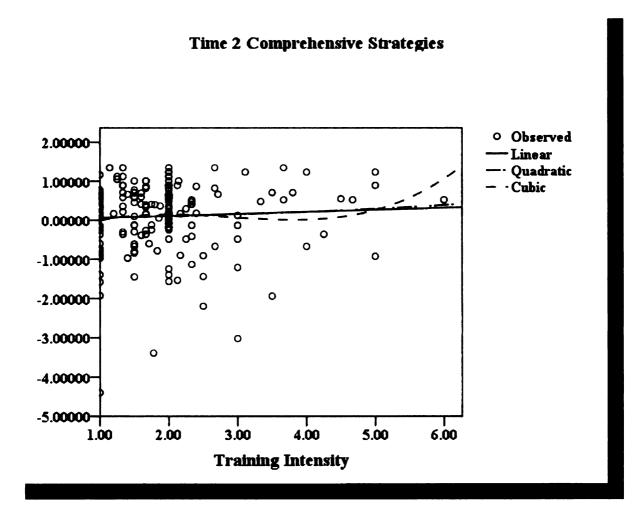


Figure G. Scatterplot of Training Breadth and Facilitation of Community Change

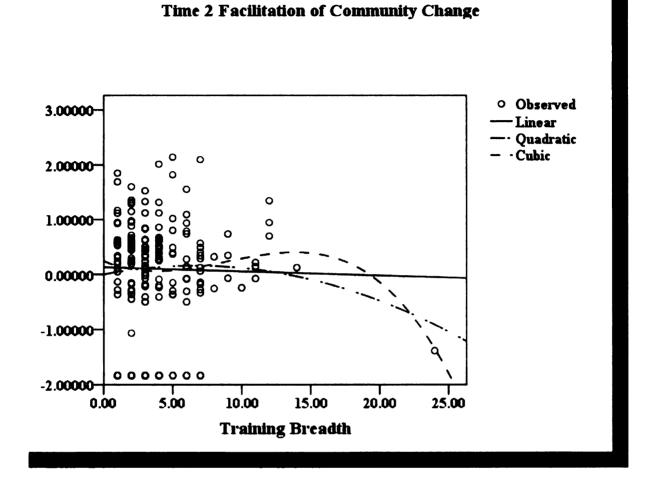
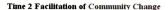
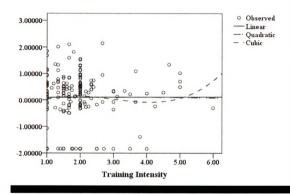


Figure H. Scatterplot of Training Frequency and Facilitation of Community Change

**Time 2 Facilitation of Community Change**  Observed 3.00000 Linear Quadratic · Cubic 0 2.00000 0 0 1.00000-00 0.00000-8 -1.00000--2.00000-2.00 4.00 6.00 8.00 0.00 **Training Frequency** 

Figure I. Scatterplot of Training Intensity and Facilitation of Community Change





### APPENDIX B

### 2005 CADCA Annual Survey of Coalitions

### 2005 NATIONAL COALITION REGISTRY

### **Overview**

The aim of CADCA's National Coalition Registry is to identify coalitions around the country and learn more about what they are doing in their communities to address substance abuse problems. By adding your voice to the National Coalition Registry, you will provide critically needed information that will advance the coalition field and help inform CADCA of training and technical assistance needs that are vital to your coalition. The National Coalition Registry will serve as a single source where coalitions, policymakers, researchers and practitioners can access up-to-date information on coalitions. Thank you for taking time to join the movement and making sure your coalition is counted in the First Annual National Coalition Registry!

In addition to being included in the National Coalition Registry, completing the Registry makes your coalition eligible to win the following prizes:

- Complete the registry by JANUARY 24, 2005 and be eligible to win a Computer (1 Grand Prize)
- Complete the registry by JANUARY 31, 2005 and be eligible to win a Free Weekend Stay at A Marriott Resort Property (1 Prize)
- Complete the registry by FEBRUARY 7, 2005 and be eligible for a Free Registration to CADCA's 2005 Mid-Year Training Institute (2 prizes) or CADCA's 2006 National Leadership Forum (2 prizes)
- All coalition that complete the registry by FEBRUARY 28, 2005 will be eligible to win a \$200.00 gift certificate from Office Depot (10 prizes) or a \$200.00 gift certificate from K-Mart (10 prizes)

#### **Notice**

The National Coalition Registry is administered and maintained by CADCA. The collection of information for the National Coalition Registry is estimated to average 30 minutes per respondent, including the time for reviewing instructions, searching existing data sources, completing and reviewing the information. Send comments regarding the National Coalition Registry to CADCA, National Coalition Registry, 625 Slaters Lane, Suite 300, Alexandria, VA 22314 or contact us at 1-800-54-CADCA or registry@cadca.org.

### **General Instructions**

The National Coalition Registry will take approximately 30 minutes to complete and asks

questions regarding your coalition's characteristics, activities and focus. We are requesting that the person in charge of the day-to-day operations of your coalition (director, CEO, executive director, etc.) fill out the registry; however, we understand that it may make sense for another person to fill out portions of the registry. In order to be included in the Registry, please be sure to fully complete the ENTIRE registry by **FEBRUARY 28, 2005**. Please mail back the Registry in the envelope that was provided to you. The Registry packet must be postmarked no later than February 28, 2005 for your coalition to be included in the Registry.

For your convenience, it may be helpful if you have the following information to refer to as you fill out the Registry:

- 1) A copy of your strategic plan/annual report
- 2) Information on sector representation in your coalition

### **Disclosure Statement**

Participation in the National Coalition Registry is voluntary. There is no penalty to you or your coalition if you decide not to participate or choose to decline to answer any particular questions in the Registry. The information requested in the Registry is information about your coalition, and with the exception of some basic primary respondent contact information, you will not be providing any personal information. Information shared about your coalition in the National Coalition Registry will be available to the public (including policymakers, funders, researchers, CADCA staff, and other coalitions) via the CADCA website. However, individuals will have varying levels of access to the information, according to the criteria listed below:

- Low level of access This group of individuals includes the general public. They will be able to browse the website and view general information about coalitions via summary tables on information pertaining to coalition demographic information; coalition background/description information; and coalition strategies and interventions.
- Moderate level of access This class of user includes all coalitions who complete the Registry. Coalitions will need to use their unique user ID and password (created during the Registry registration process) to log into a special portion of the CADCA website to access information collected in the Registry. They will be able to view all the information that the general public can view plus information on training and technical assistance questions. These individuals will also be able to produce summary reports on demand by selecting variables of interest. They will be able to export data to Microsoft Excel for further examination and analysis. Additionally, these individuals will be able to run a summary report on their own coalition information so they can track progress over time.
- Advanced level of access The final class of user includes federal partners and other government agencies as appropriate, researchers and CADCA staff. This class of user will have full access to the web registry database (again with a unique user ID and password). Although these individuals will not be able to

modify any elements of the database, their level of access will allow them to cross-tabulate, filter and summarize any variable in the database. They will also be able to export data for further examination and analysis.

# Please check one of the following:

	· · · · · · · · · · · · · · · · · · ·	the purpose and use of the information,
	<del>-</del>	sharing of my coalition's information with icipate in the National Coalition Registry.
	Please continue on to the next page.	respute in the Nutronal Countries Registry.
	I decline to participate in the National	Coalition Registry.
Gene	eral Coalition Contact Information	
Coal	ition Name:	
DUN	IS #:	
	IS #:	please provide that above.
Mail	ing Address:	
City:	·	
State	e:	
Zip+	<b>4</b> (i.e., 22314-1212):	
Cour	nty:	
Phor	ne: ()	Ext
Fax:	()	Don't have
Ema	il:	Don't have
Web	site:	Don't have
Is yo	ur street address the same as your mai	ling address?
_	YesNo	
I	F <b>YES</b> , PLEASE SKIP TO THE PRIMAI	RY RESPONDENT SECTION
I	F <b>NO</b> , PLEASE PROVIDE YOUR STRE	ET ADDRESS BELOW
Stree	et Address (if different from above):	

City:	<del></del>
State:	
<b>Zip+4</b> : (i.e., 22314-1212):	
Please provide the nearest c	ross-streets to your coalition office/location:
Primary Respondent Inform	nation
THIS REGISTRY TO THAT We are requesting that the per (director, CEO, executive director, and the sense for another)	RECTOR OF YOUR COALITION, PLEASE DIRECT PERSON.  rson in charge of the day-to-day operations of your coalition ector, etc.) fill out the Registry; however, we understand that r person to fill out portions of the Registry. However, for please provide contact information for the individual who is
Name (i.e., Ms. Joan Smith):	
Phone: ()	Ext
Email:	Don't have
What is your title?	
How long have you held this	s position?
Start Month	Start Year
Are you responsible for the (i.e., you are the coalition lea	day-to-day operation and leadership of the coalition?  der, executive director, etc.)
YesN	o
IF <b>YES</b> , PLEASE SKIP	TO ITEM 1
If you are not the director, applicable)?	what is the name of the director of your coalition (if

1. Which of the follow (check one only)	ving	bes	st describes the fo	cus/activities of you	r coalition?				
Mission focuse specific)	d so	lely	on Alcohol, Tobac	cco and Other Drug i	ssues (ATOD				
ATOD issues a	s pa	rt o	f a broader mission	/array of issues					
National Coality focus on ATOD coalitions, pleas moment to mail provided for yo of the gift certif	is reion issee con this this is this is this is in this is in this is in the interest of the i	Regues. onta s Re By r es to	onse, please stop. Voistry, the Registry in If you desire more CADCA. Thankegistry back to us in the Regist	While we appreciate yas only for those coal e information on conceyou for your time.) In the stamped envelogy, you will still be east or Kmart. We that he Registry.	itions with some nmunity anti-drug Please take a pe that was ligible to win one				
2. Do any of the follow organizations/group to plan and carry or coalition's strategies/efforts? (coal) that apply)	ps he ut yo	ur	3. PLEASE ANSWER IF YOU CHECKED YES IN ITEM 2. How does this organization/group contribute to your coalition's efforts? (check all that apply)						
	Y E S	N O	Strategy/ Program Development	Strategy/ Program Implementation	Resources (e.g., administrative, operational, or programmatic supports; space; funding; people)				
Alcohol beverage control									
Alcohol industry									
Business groups									
Child protective services									
Citizen action groups									
Civic/fraternal organizations									
Courts									
Elected officials									
Employment services									
Faith community									
Government - county									
Government - federal (e.g., DEA, NHTSA)									
Government - local									

org to p cos str	any of the follow anizations/group plan and carry of alition's ategies/efforts? (of that apply)	os he ut yo	our	3.	2. How does	SWER IF YOU CHEC this organization/group orts? (check all that a	contribute to your
Governm	nent – state						
Governm	ent - tribal			<u> </u>			
Health							
Housing	Housing authority						
Human Services			·				
Institutio learning	ns of higher						
Labor							
Law enfo	orcement						
Local go executive	vernment es						
Mass me	Mass media						
Military Air force Marines,							
National	Guard						
Parents							
Prevention providers							
	Citizens (other ents and youth)						
Probation	1						
Public as	sistance						
Recovery	community						
Recreation	on department						
	Elementary School						
Schools (K-12)	Junior High/ Middle School						
	High School		:				
State AT (SSA)	OD agency						
Transpor	tation						
Treatmen providers							
Voluntee	r organizations						
Youth	Man			1			

2	organiza to plan a coalition	s/efforts? (	ps help ut your	3. PLEASE ANSWER IF YOU CHECKED YES IN ITEM 2. How does this organization/group contribute to your coalition's efforts? (check all that apply)				
	ther:							
	ther:				-			
car We obt mo ple Pl	ry out your e thank you taining data ere informa ase contact ease take a as provided	r strateging for your and coal tion on coal tion on coal moment for you.	ies/efformiterentions the communate of the community of t	rts, we st in the hat ha hity an hk you  I this h	e ask that he Nation ve more ati-drug of for your Registry g the Reg	t you disconal Coalitics sector invocabitions artime. back to usgistry, you	ntinue filling Registry olvement. In the stan will still be	elp to plan and ag out the registry.; however, we are f you would like a development, aped envelope that eligible to win one
	alition Dire	and a ectory Qu COALIT es alcoho	apprecia uestions ION th l, tobac	ate yoo e e lead co anc	ur partic entity the	ipation in nat sponso rug-relate	the Registr rs coalition d programs	you for your time y. planning and/or a activities, policies litions)? PLEASE
		_				•	AL AGEN	-
	Yes	_	No					
	IF <b>YES</b> , PI IF <b>NO</b> , PL					M 5.		
5.	If you ans	wered No	O to QU	JESTI	ON 4: A	re you aff	iliated with	a lead coalition?
	Yes		No					
	IF YES, PI IF NO, PL					EM 6.		
6.	If you ans	wered Y	ES to Q	UEST	ION 4:	What is th	e name of t	he lead coalition?
Ple	ase answer	the follo	owing q	uestio	ns from	the perspe	ctive of the	coalition you

represent:

- If your coalition is the lead coalition (i.e., coalition of coalitions), please answer from that perspective DO NOT ANSWER ON BEHALF OF THE COALITIONS YOU LEAD.
- If your coalition is an affiliate within a network of coalitions or a freestanding coalition, please answer from that perspective.

MonthYear
How does your coalition identify itself (i.e., which definitions best reflect your coalition regarding scope and/or geography)? (check all that apply)
City-wide
Coalition of coalitions
County/regional
Faith-based
Free-standing (i.e., concerned group of citizens and/or local agency
representatives)
Neighborhood-wide
School-based
Statewide
Other (specify)
Other (specify)  Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)
Other (specify)  Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)
Other (specify)  Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)
Other (specify)  Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)  County (please specify)
Other (specify)  Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)  County (please specify)
Other (specify)  Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)  County (please specify)  Indian Reservation (please specify)  Neighborhood/Community (please specify; provide geographic boundaries if
Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)  County (please specify)  Indian Reservation (please specify)  Neighborhood/Community (please specify; provide geographic boundaries if possible)
Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)  County (please specify)  Indian Reservation (please specify)  Neighborhood/Community (please specify; provide geographic boundaries if possible)  Multiple Counties (please specify)
Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)  County (please specify)  Indian Reservation (please specify)  Neighborhood/Community (please specify; provide geographic boundaries if possible)  Multiple Counties (please specify)  Multiple Neighborhoods (please specify)
Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)  County (please specify)  Indian Reservation (please specify)  Neighborhood/Community (please specify; provide geographic boundaries if possible)  Multiple Counties (please specify)  Multiple Neighborhoods (please specify)  School District (please specify)
Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify) Congressional District (please specify) Indian Reservation (please specify) Neighborhood/Community (please specify; provide geographic boundaries if possible) Multiple Counties (please specify) Multiple Neighborhoods (please specify) School District (please specify) School Site
Which category BEST describes the geographic area that you target (i.e., when you focus your effort; population you want to impact)? (check one only)  City (please specify)  Congressional District (please specify)  County (please specify)  Indian Reservation (please specify)  Neighborhood/Community (please specify; provide geographic boundaries if possible)  Multiple Counties (please specify)  Multiple Neighborhoods (please specify)  School District (please specify)

Hispanic/Latino adults, teenage girls, etc.)?

	Entire AreaSub-Population	Please identify, as specifically as possible, the subpopulation(s) targeted by your coalition (e.g., American Indian, Youth, Hispanic/Latino, etc.):
11.	What was your COA year?	ALITION's (not fiscal agent) annual budget for the last fiscal
	Do not have a bu	adget (IF CHECKED, PLEASE SKIP AHEAD TO ITEM 13.)
	\$10,000 or less	,
	\$10,001 to \$50,0	000
	\$50,001 to \$100	,000
	\$100,001 to \$25	0,000
	\$250,001 to \$50	0,000
	\$500,001 to \$1,0	, , , , , , , , , , , , , , , , , , ,
	\$1,000,001 to \$2	
	\$2,000,001 to \$3	
	\$3,000,001 to \$4	
	\$4,000,001 to \$5	
	\$5,000,001 to \$1	
	\$10,000,001 to \$	
	\$15,000,001 to \$	
	More than \$20,0	00,000
12.	What percentage of estimate)	your coalition's total annual budget was devoted to: (please
		tobacco, and other drug-related activities/strategies related activities/strategies only
13.	How has your coalit	ion's budget changed over the past two years?
	Increased	
	Decreased	
	Stayed the same	/no significant change
14.	How would you best	describe your coalition? (check one only)
	Novice	
	Intermediate	
	Advanced	

# **Strategies and Interventions**

Some coalitions provide direct services, some leverage/coordinate services, and some

do both. Please indicate your COALITION'S degree of involvement in each of the following services/activities.

	15. OPERAT		16. ACTIVITY LEVEL (check all that apply)				
	Coalition Staff Provide Direct Service or Activity	Coalition Leverages/ Coordinates Service or Activity	Plan	Implement	Coordina te / Monitor	Provide Resource es (e.g., staff, funding,	
Community policing programs or services, for example: officers who are out in the neighborhood working with residents on crime prevention							
Information dissemination, such as: brochures, fact sheets, videos or presentations							
Community mobilization, such as: coalition building or neighborhood watch							
Community development or capacity building, such as: training and technical assistance to community groups and organizations							
Development of community laws and policies that discourage substance abuse, such as: zoning, ordinances, server training							
Development of community laws and policies that							

	15. OPERAT		16. ACTIVITY LEVEL (check all that apply)			
	Coalition Staff Provide Direct Service or Activity	Coalition Leverages/ Coordinates Service or Activity	Plan	Implement	Coordina te / Monitor	Provide Resources (e.g., staff, funding)
SPECIFICALLY discourage ALCOHOL abuse, such as: zoning, ordinances, server training						
Enforcement of community laws and policies that discourage substance abuse, such as: citizen watch groups						
Enforcement of community laws and policies that SPECIFICALLY discourage ALCOHOL abuse, such as: citizen watch groups, server stings						
Media public awareness, such as: posters, public service announcements, advertisements and commercials						
Media public awareness SPECIFIALLY for ALCOHOL problem reduction, such as: posters, public service announcements, advertisements and commercials						

	15. OPERAT		16. ACTIVITY LEVEL (check all that apply)			
	(check all that Coalition Staff Provide Direct Service or Activity	Coalition Leverages/ Coordinates Service or Activity	Plan	Implement	Coordina te / Monitor	Provide Resource es (e.g., staff, funding)
Media advocacy, media literacy and social marketing activities linked to substance abuse reduction	·					
Media advocacy, media literacy and social marketing activities linked SPECIFICALLY to ALCOHOL problem reduction						
Prenatal or infancy programs such as: maternal and child health care, nutrition or child development						
Family support programs such as: family planning, home visits from health or social service workers, housing or child care						
Pre-marital counseling						
Peer leadership or peer helper programs						
Life and social skills training programs such as: assertiveness, communication, drug refusal, problem-solving or conflict resolution skills						
Teen drop-in centers/clubs						

t apply)  Coalition  Leverages/ Coordinates  Service or  Activity	Plan	Implement	Coordina te / Monitor	Provide Resources (e.g., staff, funding

	15. OPERAT		v)	16.	ACTIVITY LI	EVEL (che apply)	ck all that
	Coalition Staff Provide Direct Service or Activity	L Co	Coalition everages/ pordinates ervice or Activity	Plan	Implement	Coordinate / Monitor	Resourc
Other:							
Monitoring, Eva	luation and T	rain	ing				
17. Have you had	d any contact	with	CADCA/C	ADCA	Institute st	aff in the	last year?
Yes	No						
18. If you did, w	hat type of co	ntac	did you ha	ve? (cl	heck all that	apply)	
Members Publicati Training Website Other (sp	ons /Technical As pecify) pecify) rrent paid CaNo	sistar ADC	A member?	es your	coalition ha	s implem	ented
		20.	Implemente Activity (check all that apply)	d 21.	Received inf training on t all that apply	his topic fr	
					PLEASE NO may have eng activity, but r training.	gaged in a p	articular
TYPE OF AC	TIVITY				DCA/CADCA estitute staff	Other source	Did not receive training

	20.	Implemented Activity (check all that apply)	21.	Received information and/or training on this topic from: (check all that apply)  PLEASE NOTE: your coalition may have engaged in a particular activity, but may not have received training.
Collected data to determine or monitor the extent of substance abuse problems in the community (Needs Assessment).				
Collected data on risk and protective factor predictors for substance abuse and other related problems.				
Collected data on the readiness of your community/system to select and implement strategies found to be effective in addressing substance abuse.				
Developed a logic model and objectives for what the coalition will accomplish.				
Used data to prioritize substance abuse needs.				
Matched prioritized substance abuse needs with evidence-based programs/strategies.				
Developed local or "homegrown" programs/strategies to address prioritized substance abuse needs.				
Developed or selected instruments and methods to assess outcomes.				
Collected data to monitor the implementation of programs/strategies.				
Collected data to assess immediate/intermediate outcomes of programs/strategies.				
Collected data to assess long- term outcomes of programs/strategies.				
Reviewed immediate/intermediate outcome data to make decisions about programs/strategies				

	20.	Implemented Activity (check all that apply)	21.	training on ( all that appl  PLEASE NO may have en	formation and/or this topic from: (check y)  OTE: your coalition gaged in a particular may not have received
Made changes to programs/strategies based on evaluation data.					
Disseminated program evaluation results and monitoring data to key community stakeholders.					
Re-designed evaluation methods and/or measures to collect better/additional information.					
Used data as a basis for new grants or funding proposals.					
Somewhat dissatisfiedNone received					
23. To what extent has the Te from CADCA/CADCA In prevention services?					
A great dealSomewhatNot very muchNot at allNot applicable					
24. Does your coalition obtain logistical support from an		•		-	
Centers for Applicatio Center for Substance A Center for Substance A Drug Enforcement Ag	Abuse Abuse	Prevention (C Treatment (C	CSAP (SAT)	)	's)

Sti

Ple pe

25

26

2

2

2

3()

		aringhouse for Alcohol & Drug Information (NCADI)	
	National G		
		hway Traffic Safety Administration (NHTSA)	
		itute on Alcohol Abuse and Alcoholism (NIAAA)	
	National In	itute on Drug Abuse (NIDA)	
Sti	ructure and Fun	<u>ion</u>	
	ease answer the f rspective of a fisc	llowing questions for your coalition only (i.e., not from the agent).	
25.		on have a board or a governing body that sets the direction of a formal group or body in power that makes decisions for the	f
	Yes	No	
26	. Does your coali	on have written bylaws/rules of operation?	
	Yes	No	
	your target are	on have a written strategic plan to reduce substance abuse in (i.e., a written document that specifies a coalition's aims, how it ms, and how it will be able to know if it was successful or not in ims)?	
	Yes	No	
		CONTINUE ON TO ITEM 28. SKIP TO ITEM 30.	
28.	. Does the writte	strategic plan have measurable outcomes?	
	Yes	No	
29.	. Has your coalit	on begun to implement its strategic plan?	
	Yes	No	
30.		ime equivalent paid STAFF work on alcohol, tobacco or othe icluding in-kind staff (i.e., paid by someone else to work at you cone only)	
	None	8 - 10	
	Fewer than 3 - 5	11 - 20 More than 20	
	J <b>-</b> J	MOTE MAI 20	

Non-profits (e.g., United Way)

Private donations
State government

Sales of products or Dues		
Other (specify)		
37. Please rank the <u>top 5 largest sources</u> of funding/re IN ITEM 36) that support your coalition and its str funding, 2 = next highest level of funding, etc.)		
Asset forfeiture		
City government		
Corporate or Business		
County government		
Federal Government – Direct from Agency		
Federal Government – Via Block Grant Federal Government – Other		
Foundations		
Fundraising		
In-kind contributions		
Non-profits (e.g., United Way)		
Private donations		
State government		
Sales of products or Dues		
Other (specify)		
20. 11		<del></del>
38. Has your coalition received funding from any of the following programs?	Currently	In the past
(check all that apply)	(2004-2005)	(Before 2004)
Drug Free Communities Support Program		
Executive Office of Weed and Seed		
Office of Juvenile Justice and Delinquency Prevention (OJJDP) Underage Drinking Initiative		
Safe and Drug Free Schools (local; state grant portion of the 20% set-aside; or national)		
Substance Abuse Prevention and Treatment (SAPT) Block Grant		
State Incentive Grant (SIG) Sub-recipient		
Selected Outcome Indicators  39. Does your coalition collect data on the following y indicators? (check all that apply) Age of first use	outh substance	abuse outcome
Perception of disapproval by adults or peers		
Perception of risk or harm		

	30-Day Use
	Perceived availability
40.	What instrument(s) do you use to collect your data? (check all that apply)
	American Drug and Alcohol Survey (ADAS)
	Communities That Care Survey (CTC)
	Search Institute's Developmental Assets Survey
	Pride Survey (PRIDE)
	Youth Risk Behavior Survey (YRBS)
	Items/Scales from the CSAP Core Measures Initiative
	Survey(s) sponsored/developed by your state.
	Survey(s) that your coalition or community created/developed for your own
	purposes
	Other (specify)
	Other (specify)
41.	When did you start collecting survey data in your community?
	Year
	Who is responsible for coordinating/analyzing your survey data? (check all that apply)
	City
	Coalition
	College/University
	Consultant
	County
	Member organization staff person
	Research organization
	State
	Other (specify)
	Other (specify)
	Does your coalition collect/utilize any of the following social indicator data? (check all that apply)
	Alcohol consumption/sales data
	Alcohol/drug-related traffic fatalities data
	Alcohol outlet density data
	Arrest/incarceration data
	Census data
	Crime data
	Drug Abuse Warning Network (DAWN) data

I	Emergency room data
I	Health data
	National Registry of Substance Abuse Treatment Services (formerly the Uniform
	Facility Data Set)
1	National Registry on Drug Use & Health data (formerly the National Household
	Registry on Drug Abuse)
(	Other (specify)
	Other (specify)

	44. Does your coalition collect data on any of the following substances?	45. Based on available, verifiable data (e.g., Health Department data, substance abuse incidence/prevalence data, Emergency Room data, etc.), which of the following are currently causing the most problems in your community?  1 = the biggest problem  2 = the next biggest problem  3 = the third biggest problem  4 = fourth biggest problem  5 = fifth biggest problem  RANK 5 ONLY
A1 1 1	(check all that apply)	RAINE 3 OND 1
Alcohol		
Amphetamines		
Barbituates		
Cocaine (including Crack)		
GHB		
Hallucinogens (other than LSD)		
Heroin		
Hydrocodone		
Inhalants		
LSD		
Marijuana		
MDMA (Ecstasy)		
Methamphetamine (including Ice)		
Nitrites		
Oxycodone (Oxycontin)		
PCP		
Prescription Drugs (other than Hydrocodone and Oxycodone)		
Rohypnol (date rape drug)		
Steroids		
Tobacco		
Tranquilizers		
Other:		
Other:		

### APPENDIX C

## 2006 Annual Survey of Coalitions

### 2006 NATIONAL COALITION REGISTRY

### **Overview**

The aim of CADCA's National Coalition Registry is to identify coalitions around the country and learn more about what they are doing in their communities to address substance abuse problems. By adding your voice to the National Coalition Registry, you will provide critically needed information that will advance the coalition field and help inform CADCA of training and technical assistance needs that are vital to your coalition. The National Coalition Registry will serve as a single source where coalitions, policymakers, researchers and practitioners can access up-to-date information on coalitions. Thank you for taking time to join the movement and making sure your coalition is counted in the National Coalition Registry!

Different types of audiences will have different types of access to the information in the Registry. Audiences with access include the general public, coalitions who complete the Registry, and CADCA staff, researchers, federal partners and government agencies. The general public will be able to view summary tables pertaining to coalition demographics, descriptions, strategies and interventions. Coalitions who complete the Registry will have a unique user ID and password so they can access information collected in the Registry. These coalitions will be able to view all the information that the general public can view plus information on training and technical assistance questions. Finally, federal partners and other government agencies as appropriate, researchers and CADCA staff will have full access to the web registry database using a unique user ID and password.

### **General Instructions**

The National Coalition Registry will take approximately 30 minutes to complete and asks questions regarding your coalition's characteristics, activities and focus. We are requesting that the person in charge of the day-to-day operations of your coalition (director, CEO, executive director, etc.) fill out the Registry; however, we understand that it may make sense for another person to fill out portions of the registry.

For your convenience, it may be helpful if you have the following information to refer to as you fill out the Registry:

- 3) A copy of your strategic plan/annual report
- 4) Information on sector representation in your coalition

Please read the following and put your initials in the box
--

<del></del>	I have read the above information, understand the purpose and use of the
l	information, agree to the above standards about the sharing of my coalition's
	information with the public, and give my consent to participate in the National

# Coalition Registry.

The collection of information for the Nat 30 minutes per respondent, including the existing data sources, completing and rev regarding the National Coalition Registry	vis administered and maintained by CADCA. cional Coalition Registry is estimated to average time for reviewing instructions, searching viewing the information. Send comments y to CADCA, National Coalition Registry, 625 22314 or contact us at 1-800-54-CADCA or
complete the Registry but we as registry@cadea.org or 800-542-232	alition is no longer active. You do not have to sk that you contact CADCA at 22, ext. 243 to let us know. If your coalition contact us so you can be counted in the 2006
<b>GENERAL COALITION CONTACT</b>	INFORMATION
Coalition Name:	
DUNS #:	JNS # please provide that above.
Mailing Address:	
City:	<del></del>
State:	
<b>Zip+4</b> (i.e., 22314-1212):	
County:	Country:
Phone: ()	Ext
Fax: ()	Don't have
Email:	Don't have
Website:	
Please provide the nearest cross-street	s to your coalition office/location:

Is your street address the same as your mailing address?
YesNo
IF <b>YES</b> , PLEASE SKIP TO THE NEXT PAGE IF <b>NO</b> , PLEASE PROVIDE YOUR STREET ADDRESS BELOW
Street Address (if different from above):
City:
State:
<b>Zip+4</b> : (i.e., 22314-1212):
**********************
Please create a username and password that you will use to access the Registry's online reports. Be sure to record this information because you will need them to access the Registry in the future.
USERNAME:  (Minimum of 8, maximum of 15 characters, no spaces or special characters such as *, @,
& etc.)
PASSWORD:(Minimum of 8, maximum of 15 characters, no spaces or special characters such as *, @, & etc.)
PRIMARY RESPONDENT INFORMATION
IF YOU ARE NOT THE DIRECTOR OF YOUR COALITION, PLEASE DIRECT THIS REGISTRY TO THAT PERSON.
We are requesting that the person in charge of the day-to-day operations of your coalition (director, CEO, executive director, etc.) fill out the Registry; however, we understand that it may make sense for another person to fill out portions of the Registry. However, for the purposes of this Registry, please provide contact information for the individual who is the PRIMARY respondent.
Name (i.e., Ms. Joan Smith):

Phone: ()_		Ext
Email:		Don't have
What is your ti	tle?	
	you held this positio tart Month	n? Start Year
	sible for the day-to-coalition leader, exec	day operation and leadership of the coalition? cutive director, etc.)
Yes	No	
COALITION E	DIRECTORY QUES	<u>TIONS</u>
2. Which of the		cribes the focus/activities of your coalition?
Mission specific)	n focused solely on Al	Icohol, Tobacco and Other Drug issues (ATOD
ATOD	issues as part of a bro	pader mission/array of issues
No focu	is on ATOD issues	

Alcohol beverage control Alcohol industry Business groups Child protective services Citizen action groups Civic/fraternal organizations Courts Elected officials Employment services Faith community Government - federal (e.g., DEA, NHTSA) Government - state Government - state Government - state Government - tribal Health Housing authority Human Services Institutions of higher learning Labor Law enforcement Local government	2. Do any of the follorganizations/group help to plan and out your coalition strategies/efforts (check all that ap	oups carry n's ?	_	3. PLEASE ANSWER IF YOU CHECKED YES IN ITEM 2. How does this organization/group contribute to your coalition's efforts? (check all that apply)						
control Alcohol industry Business groups Child protective services Citizen action groups Civic/fraternal organizations Courts Elected officials Employment services Faith community Government - county Government - federal (e.g., DEA, NHTSA) Government - state Government - tribal Health Housing authority Human Services Institutions of higher learning Labor Law enforcement Local government executives		EO		E O Program		(e.g., space, funding, people, administrative, operational, programmatic				
Business groups Child protective services Citizen action groups Civic/fraternal organizations Courts Elected officials Employment services Faith community Government - county Government - federal (e.g., DEA, NHTSA) Government - local Government - state Government - tribal Health Housing authority Human Services Institutions of higher learning Labor Law enforcement Local government executives										
Child protective services  Citizen action groups  Civic/fraternal organizations  Courts  Elected officials  Employment services  Faith community  Government - county  Government - federal (e.g., DEA, NHTSA)  Government - state  Government - tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	Alcohol industry									
services  Citizen action groups  Civic/fraternal organizations  Courts  Elected officials  Employment services  Faith community  Government - county  Government - federal (e.g., DEA, NHTSA)  Government - state  Government - tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	Business groups									
Civic/fraternal organizations  Courts  Elected officials  Employment services  Faith community  Government - county  Government - federal (e.g., DEA, NHTSA)  Government - state  Government - tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	-									
Courts  Elected officials  Employment services  Faith community  Government - county  Government - federal (e.g., DEA, NHTSA)  Government - state  Government - tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	Citizen action groups			-						
Elected officials  Employment services  Faith community  Government - county  Government - federal (e.g., DEA, NHTSA)  Government - local  Government - tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives										
Employment services  Faith community Government - county Government - federal (e.g., DEA, NHTSA)  Government - local Government - state Government - tribal Health Housing authority Human Services Institutions of higher learning Labor Law enforcement Local government executives	Courts									
Faith community Government - county Government - federal (e.g., DEA, NHTSA) Government - local Government - state Government - tribal Health Housing authority Human Services Institutions of higher learning Labor Law enforcement Local government executives	Elected officials									
Government - county Government - federal (e.g., DEA, NHTSA) Government - state Government - tribal Health Housing authority Human Services Institutions of higher learning Labor Law enforcement Local government executives	Employment services									
Government - federal (e.g., DEA, NHTSA)  Government - local  Government - state  Government - tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	Faith community									
(e.g., DEA, NHTSA)  Government - local  Government - state  Government - tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	Government - county	<b>!</b>	<u> </u>							
Government – state  Government – tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives										
Government - tribal  Health  Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	Government - local									
Health Housing authority Human Services Institutions of higher learning Labor Law enforcement Local government executives	Government – state									
Housing authority  Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	Government - tribal									
Human Services  Institutions of higher learning  Labor  Law enforcement  Local government executives	Health									
Institutions of higher learning  Labor  Law enforcement  Local government executives	Housing authority									
learning  Labor  Law enforcement  Local government executives	Human Services									
Law enforcement  Local government executives										
Local government executives	Labor	$\prod$								
executives	Law enforcement									
Mass media										
	Mass media									

organi help to out you strateg	y of the follo zations/gro plan and c ur coalition gies/efforts? all that ap	ups arry 's	3. PLEASE ANSWER IF YOU CHECKED YES IN ITEM 2. How does this organization/group contribute to your coalition's efforts? (check all that apply)				
Air force, Ar	Military Services (e.g., Air force, Army, Marines, Navy)						
National Gua	ard				4		
Parents							
Prevention providers/cer	nters						
Private Citize than parents youth)							
Probation							
Public assista	ance						
Recovery co	mmunity						
Recreation d	epartment						
	Elemen tary School						
Schools (K-12)	Junior High/ Middle School						
	High School						
State ATOD (SSA)	agency						
Transportation	on						
Treatment providers/ce	nters						
Volunteer organization							
Youth							
Other:	<del></del>						
Other:							

4. Is YOUR COALITION the lead entity that sponsors coalition planning and/or coordinates alcohol, tobacco and other drug-related programs, activities, policies and strategies for or with other coalitions (i.e., coalition of coalitions, umbrella coalition)? PLEASE NOTE – NOT TO BE CONFUSED WITH A FISCAL

	AGENT			
	Yes		No	
	•		SKIP TO ITEM 7. CONTINUE ON TO	
5.	If you an	swered N	O to QUESTION	4: Are you affiliated with a lead coalition?
	Yes		No	
	•		CONTINUE ON T KIP TO ITEM 7.	O ITEM 6.
6.	If you an	swered Y	ES to QUESTIO	N 4: What is the name of the lead coalition?
	ease answe u represer	_	nainder of the Re	gistry from the perspective of the coalition
	•	coalitio	n of coalitions), p	ad coalition or umbrella coalition (i.e., lease answer from that perspective – DO HALF OF THE COALITIONS YOU LEAD.
	•	If your	coalition is an aff	filiate within a network of coalitions or a lease answer from that perspective.
7.	When wa	as your c	oalition first start	ed?
		_Month	Year	Don't Know
8.		•	palition identify its g scope) (check all	self (i.e., which definitions best reflect your that apply)
		n-based		
	Free represent	_	(i.e., concerned gr	oup of citizens and/or local agency
	_	ool-based		
				antaged community
			y)	
	Oine	a (specify	/)	<del></del>
9.				e geographic area that you target (i.e., when want to impact)? (check one only)

City (please spe	(City)	
Congressional I	District (please spec	eify)
County (please	specify)	
Indian Reservat	ion (please specify)	)
Neighborhood/(	Community (please	specify; provide geographic boundaries if
possible)		
Multiple Counti	ies (please specify)	
Multiple Neighl	borhoods (please sp	pecify)
School District	(please specify)	
School Site		
Multiple School	l Sites (please speci	fy)
Regional (please	e specify)	
Statewide		
Other (please sp	ecify)	
Entire AreaSub-Population	subpopulation(s	as specifically as possible, the ) targeted by your coalition (e.g., American Hispanic/Latino, etc.):
Sub-Population  11. What was your CO	subpopulation(s Indian, Youth, I	targeted by your coalition (e.g., American
Sub-Population  11. What was your CO year?	subpopulation(s Indian, Youth, I ————————————————————————————————————	) targeted by your coalition (e.g., American Hispanic/Latino, etc.):
Sub-Population  11. What was your CO year? Do not have a b	subpopulation(s Indian, Youth, I ————————————————————————————————————	targeted by your coalition (e.g., American Hispanic/Latino, etc.):  iscal agent) annual budget for the last fisca  ED, PLEASE SKIP AHEAD TO ITEM 13.)
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less	subpopulation(s Indian, Youth, H ALITION's (not f	targeted by your coalition (e.g., American Hispanic/Latino, etc.):  iscal agent) annual budget for the last fisca  ED, PLEASE SKIP AHEAD TO ITEM 13.) \$1,000,000 to \$1,999,999
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less \$10,000 to \$49,	subpopulation(s Indian, Youth, I  ALITION's (not f  oudget (IF CHECKI	targeted by your coalition (e.g., American Hispanic/Latino, etc.):  iscal agent) annual budget for the last fisca  ED, PLEASE SKIP AHEAD TO ITEM 13.) \$1,000,000 to \$1,999,999 \$2,000,000 to \$2,999,999
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less \$10,000 to \$49, \$50,000 to \$99,	subpopulation(s Indian, Youth, I ————————————————————————————————————	targeted by your coalition (e.g., American Hispanic/Latino, etc.):  iscal agent) annual budget for the last fisca  ED, PLEASE SKIP AHEAD TO ITEM 13.) \$1,000,000 to \$1,999,999 \$2,000,000 to \$2,999,999 \$3,000,000 to \$3,999,999
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less \$10,000 to \$49, \$50,000 to \$99, \$100,000 to \$19	subpopulation(s Indian, Youth, I  ALITION's (not f  budget (IF CHECKI  999  999  9999	targeted by your coalition (e.g., American Hispanic/Latino, etc.):  iscal agent) annual budget for the last fisca  ED, PLEASE SKIP AHEAD TO ITEM 13.) \$1,000,000 to \$1,999,999 \$2,000,000 to \$2,999,999 \$3,000,000 to \$3,999,999 \$4,000,000 to \$4,999,999
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less \$10,000 to \$49, \$50,000 to \$99, \$100,000 to \$19, \$200,000 to \$29	subpopulation(s Indian, Youth, I  ALITION's (not f  audget (IF CHECKI  999  999  999  99,999	iscal agent) annual budget for the last fiscal agent) annual budget for the last fiscal particles and particles and particles and particles and particles annual budget for the last fiscal particles and
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less \$10,000 to \$49, \$50,000 to \$99, \$100,000 to \$19, \$200,000 to \$29, \$300,000 to \$39	subpopulation(s Indian, Youth, I  ALITION's (not f  oudget (IF CHECKI  999  999  99,999  99,999  99,999	targeted by your coalition (e.g., American Hispanic/Latino, etc.):  iscal agent) annual budget for the last fisca  ED, PLEASE SKIP AHEAD TO ITEM 13.) \$1,000,000 to \$1,999,999 \$2,000,000 to \$2,999,999 \$3,000,000 to \$3,999,999 \$4,000,000 to \$4,999,999 \$5,000,000 to \$9,999,999 \$10,000,000 to \$14,999,999
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less \$10,000 to \$49, \$50,000 to \$99, \$100,000 to \$19, \$200,000 to \$29, \$300,000 to \$39, \$400,000 to \$49, \$400,000 to \$49, \$100,000 to \$40, \$100,000 to \$40,000 to	subpopulation(s Indian, Youth, I  ALITION's (not f  sudget (IF CHECKI  999 999 99,999 99,999 99,999	iscal agent) annual budget for the last fiscal agent) annual budget for the last fiscal ED, PLEASE SKIP AHEAD TO ITEM 13.) \$1,000,000 to \$1,999,999 \$2,000,000 to \$2,999,999 \$3,000,000 to \$3,999,999 \$4,000,000 to \$4,999,999 \$5,000,000 to \$9,999,999 \$10,000,000 to \$14,999,999 \$15,000,000 to \$19,999,999
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less \$10,000 to \$49, \$50,000 to \$99, \$100,000 to \$19, \$200,000 to \$29, \$300,000 to \$39	subpopulation(s Indian, Youth, I  ALITION's (not f  sudget (IF CHECKI  999 999 99,999 99,999 99,999	targeted by your coalition (e.g., American Hispanic/Latino, etc.):  iscal agent) annual budget for the last fiscal agent) annual budget for the last fiscal agent annual budget for the last fiscal agent) annual budget for the last fiscal agent) annual budget for the last fiscal agent agent annual budget for the last fiscal agent
Sub-Population  11. What was your CO year?  Do not have a b \$9,999 or less \$10,000 to \$49, \$50,000 to \$99, \$100,000 to \$19, \$200,000 to \$29, \$300,000 to \$39, \$400,000 to \$49, \$500,000 to \$99, \$100,000 to \$29, \$300,000 to \$39, \$400,000 to \$49, \$500,000 to \$99, \$100,000 to \$99, \$100,000 to \$19, \$100,000 to	subpopulation(s Indian, Youth, I  ALITION's (not f  rudget (IF CHECKI  999 999 99,999 99,999 99,999 99,999 99,999	targeted by your coalition (e.g., American Hispanic/Latino, etc.):  iscal agent) annual budget for the last fiscal agent) annual budget for the last fiscal agent annual budget for the last fiscal state agent annual budget for the last fiscal agent annual budget for the last fiscal agent annual budget for the last fiscal agent agent annual budget for the last fiscal agent agen

Increased	
Decreased	
Stayed the sa	ame/no significant change
v would you l	best describe your coalition? (check one only
•	best describe your coalition? (check one only
_Novice	
•	

#### STRATEGIES AND INTERVENTIONS

Some coalitions provide activities directly, some leverage/coordinate activities, and some do both. Please indicate your COALITION'S degree of involvement in each of the following activities.

	15. OPERA (check all tha		16. ACTIVITY LEVEL (check all that apply)			
	Coalition Staff Directly Provide Activity	Coalition Leverages/ Coordinates Activity	Plan	Implement	Coordina te / Monitor	Provide Resources (e.g., staff, funding)
Brief counseling/early intervention activities such as substance abuse assessment in the emergency room, primary care offices, etc.						
Community development or capacity building, such as: training and technical assistance to community groups and organizations						
Community mobilization, such as: coalition building or neighborhood watch						
Community policing programs or services, for example: officers who are out in the neighborhood						

	15. OPERA		16. ACTIVITY LEVEL (check all that apply)				
	(check all tha	at apply)					
	Coalition Staff Directly Provide Activity	Coalition Leverages/ Coordinates Activity	Plan	Implement	Coordina te / Monitor	Provide Resources (e.g., staff, funding)	
working with residents on crime							
prevention			_				
Crime Prevention Through Environmental Design (CPTED)							
Development of							
community laws and policies that discourage							
substance abuse, e.g. zoning,							
ordinances, server training							
Development of							
community laws							
and policies that SPECIFICALLY							
discourage							
ALCOHOL abuse, such as: zoning,							
ordinances, server training							
Drug-free social			_				
and recreational							
activities, such as:							
drug-free dances, 'Just Say No'							
clubs, prom or graduation							
contracts							
Enforcement of community laws							
and policies that discourage							
substance abuse, such as: citizen							
watch groups							
Enforcement of community laws							
and policies that SPECIFICALLY	,						
discourage ALCOHOL abuse,							
such as: citizen watch groups,							
server stings							

	15. OPERA (check all tha		16. ACTIVITY LEVEL (check all that apply)			
	Coalition Staff Directly Provide Activity	Coalition Leverages/ Coordinates Activity	Plan	Implement	Coordina te / Monitor	Provide Resources (e.g., staff, funding)
Family support programs such as: family planning, home visits from health or social service workers, housing or child care						
Increasing access to treatment						
Increasing effectiveness of substance abuse treatment						
Information dissemination, such as: brochures, fact sheets, videos or presentations						
Life and social skills training programs such as: assertiveness, communication, drug refusal, problem-solving or conflict resolution skills						
Media advocacy, media literacy and social marketing activities linked SPECIFICALLY to ALCOHOL problem reduction						
Media advocacy, media literacy and social marketing activities linked to substance abuse reduction						

	15. OPERA		16. ACTIVITY LEVEL (check all that apply)					
	Coalition Staff Directly Provide Activity	Coalition Leverages/ Coordinates Activity	Plan	Implement	Coordina te / Monitor	Provide Resources (e.g., staff, funding)		
Media public awareness SPECIFIALLY for ALCOHOL problem reduction, such as: posters, public service announcements, advertisements and commercials								
Media public awareness, such as: posters, public service announcements, advertisements and commercials								
Peer leadership or peer helper programs								
Recovery support activities such as: sober housing, peer support, relapse prevention or employment.								
Re-entry support activities for offenders such as returning from incarceration								
Teen drop-in centers/clubs								
Youth community action groups, such as: SADD, youth councils								
Youth support groups, such as: Alateen, COSA								
Other:								
Other:								

# **MONITORING, EVALUATION AND TRAINING**

last year?		act with CADCA/National Coalition Institute staff in the
Yes	No _	Don't know
•		FINUE ON TO ITEM 18.
IF NO, PL	EASE SKIP T	OTEM 20.
18. What type	e of contact di	id you have? (check all that apply)
CAD	CA Leadership	p Forum
Brief	Technical Ass	sistance (via phone or email)
CAD	CA Mid-Year	Training Institute
Train	ing	
Meml		
Webs	ite	
Public		
Other	(specify)	
Other	(specify)	
	Institute train	ou attended any of the following CADCA/National nings?
	y training	
4-day		
	ition Root Car	m · ·
Coali		
Natio	onal Coalition	Academy
Natio	onal Coalition ning of Trainer	Academy
Nation Nation Nation Train Other	onal Coalition ning of Trainer or (please speci	Academy rs ify)
Nation Other Other	onal Coalition ning of Trainer r (please speci r (please speci	Academy rs ify)ify)
Nation Other Other	onal Coalition ning of Trainer r (please speci r (please speci	Academy rs ify)
Nation Train Other Other Did	onal Coalition ning of Trainer or (please speci or (please speci not attend a C	Academy rs ify)ify)

	21. Implemented Activity (check all that apply)	22. Received information and/or training on this topic from: (check all that apply)  PLEASE NOTE: your coalition may have engaged in a particular activity, but may not have received training.			
TYPE OF ACTIVITY		CADCA / National Coalition Institute staff	Other source	Did not receive training	
Collected data to determine or monitor the extent of substance abuse problems in the community (Needs Assessment).					
Collected data on risk and protective factor predictors for substance abuse and other related problems.					
Collected data on the readiness of your community/system to select and implement strategies found to be effective in addressing substance abuse.					
Developed a logic model and objectives for what the coalition will accomplish.					
Used data to prioritize substance abuse needs.					
Matched prioritized substance abuse needs with evidence-based programs/strategies.					
Developed local or "homegrown" programs/strategies to address prioritized substance abuse needs.					
Developed or selected instruments and methods to assess outcomes.					
Collected data to monitor the implementation of programs/strategies.					
Collected data to assess immediate/intermediate outcomes of programs/strategies.					
Collected data to assess long-term outcomes of programs/strategies.					
Reviewed immediate/intermediate outcome data to make decisions about programs/strategies					
Made changes to programs/strategies based on evaluation data.					

	21. Implemented Activity (check all that apply)	22. Received information and/or training on this topic from: (check all that apply)  PLEASE NOTE: your coalition may have engaged in a particular activity, but may not have received training.			
Disseminated program evaluation results and monitoring data to key community stakeholders.					
Re-designed evaluation methods and/or measures to collect better/additional information.					
Used data as a basis for new grants or funding proposals.					
NONE					
Very dissatisfiedNone received  24. To what extent has the Technifrom CADCA/National Coalities effective prevention services?	ion Institute impr	= :			
A great dealSomewhatNot very muchNot at allNot applicable					
25. Does your coalition obtain trail logistical support from any of	_				
Centers for Application of Center for Substance Abuse Center for Substance Abuse Drug Enforcement Agency National Clearinghouse for	e Prevention (CSA) e Treatment (CSA) (DEA) Demand R	P) C) eduction			

National	Highway Traffic Safety Administration (NHTSA) Institute on Alcohol Abuse and Alcoholism (NIAAA) Institute on Drug Abuse (NIDA)
STRUCTURE A	ND FUNCTION
Please answer the perspective of a fis	e following questions for your coalition only (i.e., not from the scal agent).
	dition have a board or a governing body that sets the direction of i.e., a formal group or body in power that makes decisions for the
Yes	No
27. Does your coa	dition have written bylaws/rules of operation?
Yes	No
your target ar	elition have a written strategic plan to reduce substance abuse in rea (i.e., a written document that specifies a coalition's aims, how it aims, and how it will be able to know if it was successful or not in e aims)?
Yes	No
-	SE CONTINUE ON TO ITEM 29. SE SKIP TO ITEM 31.
29. Does the write	ten strategic plan have measurable outcomes?
Yes	No
30. Has your coal	ition begun to implement its strategic plan?
Yes	No
•	ll-time equivalent paid STAFF work on alcohol, tobacco or other s, including in-kind staff (i.e., paid by someone else to work at your leck one only)
None - 20M	Fewer than 33 - 56 - 78 - 101 ore than 20
32. How many Vo	OLUNTEERS on average per month actively participate in your

coalition's activities/strategies? (Volunteer: someone who for their involvement in your coalition) (check one only)	does not get p	oaid a salary
None1-56-1011-25	_26-50	More
SUSTAINABILITY		
33. Do you have a fiscal agent (i.e., an organization/entity that	administers y	vour funds)?
YesNo		
IF <b>YES</b> , PLEASE CONTINUE ON TO ITEM 34. IF <b>NO</b> , PLEASE SKIP TO ITEM 35.		
34. Who is your fiscal agent?	· · · · · · · · · · · · · · · · · · ·	
35. Has your coalition been granted nonprofit status by the status)?	IRS (e.g., has	501(c)3
YesNo		
IF <b>YES</b> , PLEASE CONTINUE ON TO ITEM 36. IF <b>NO</b> , PLEASE SKIP TO ITEM 37.		
36. What year was your coalition granted nonprofit status?  Don't know		
37. Has your coalition received funding from any of the following programs?  (check all that apply)	Currently (2005-2006)	In the past (Before 2005)
Drug Free Communities Support Program		
Drug Free Communities Support Program Mentoring Grant		
Community Capacity and Development Office (formerly the Executive Office of Weed and Seed)		
Office of Juvenile Justice and Delinquency Prevention (OJJDP) Underage Drinking Initiative		
Safe and Drug Free Schools (local; state grant portion of the 20% set-aside; or national)		
Substance Abuse Prevention and Treatment (SAPT) Block Grant		
State Incentive Grant (SIG) or SPF/SIG Sub-recipient		
Traffic Safety Funding (local or state)		

If you are a **CURRENT** Drug-Free Communities Support Program grantee, please answer the following questions:

38. What is your DFCSP Gran	t ID number?	<del></del>					
39. Please indicate which Cycle Cycle I (Years 1-5)	e you are currently in:Cycle II (Years 6	and over)					
40. What year did you receive funding for your CURRENT DFCSP grant?							
	41. What sources of funding/resources support your coalition and its strategies?  (check all that apply)	42. Please rank the top 5 largest sources of funding/resources (THAT YOU CHECKED IN ITEM 41) that support your coalition and its strategies.  (1 = highest level of funding,					
		2 = next highest level of funding, etc.)					
Asset forfeiture							
City government							
Corporate or Business							
County government							
Federal government – Direct from Agency							
Federal Government – Via Block Grant							
Federal Government – Other							
Foundations							
Fundraising							
In-kind contributions							
Non-profits (e.g., United Way)							
Private donations							
State government							
Sales of products or Dues							
Other (specify)							
NONE							

### **SELECTED OUTCOME INDICATORS**

43. Does your coalition collect data on the following youth substance abuse outcome indicators? (check all that apply)

	Age of first use
	Perception of disapproval by parents
	Perception of risk or harm
	30-Day Use
	Perceived availability
44.	What instrument(s) do you use to collect your data? (check all that apply)
	American Drug and Alcohol Survey (ADAS)
	Communities That Care Survey (CTC) or the CSAP Substance Abuse Risk
	and Protective Factor Student Survey (SARPF)
	Search Institute's Developmental Assets Survey
	Pride Survey (PRIDE)
	Youth Risk Behavior Survey (YRBS)
	Items/Scales from the CSAP Core Measures Initiative
	Survey(s) sponsored/developed by your state
	(Please specify the name of your state
	<u>,                                     </u>
	Survey(s) that your coalition or community created/developed for your own
	purposes
	Other (specify)
	Other (specify)
45.	When did you start collecting survey data in your community? YearDon't know/Does not apply
	learBon t know/boes not appry
	Who is responsible for coordinating/analyzing your survey data? (check all that apply)
	City
	Coalition
	College/University
	Consultant
	County
	Member organization staff person
	Research organization
	State
	Other (specify)
	Other (specify)
	Don't know/Does not apply
47.	Does your coalition collect/utilize any of the following social indicator data?

Alcohol/drug-related		es data	
	ted trafi	fic fatalities da	ta
Alcohol outlet der	isity dat	ta	
Arrest/incarceration	on data		
Census data			
Crime data			
Drug Abuse Warn	ing Net	work (DAWN	) data
Emergency room	data		
Health data			
	of Subs	stance Abuse T	reatment Services (formerly the Uniform
Facility Data Set)	_		
		_	h data (formerly the National Household
Registry on Drug	Abuse)		
Other (specify)			
Other (specify)	-		
NONE			
	48.	Does your	49. Based on available, verifiable data
		coalition	(e.g., Health Department data,
		collect data	substance abuse incidence/prevalence data, Emergency Room data, etc.),
		on any of the following	which of the following are currently
		substances?	causing the most problems in your
			community?
			1 = the biggest problem
			2 = the next biggest problem
	1		3 = the third biggest problem
			5 - the tim a biggest problem
			4 = fourth biggest problem
			4 = fourth biggest problem 5 = fifth biggest problem
	(check	all that apply)	4 = fourth biggest problem
Alcohol	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines Barbituates	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines Barbituates Cocaine (including Crack)	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines Barbituates	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines Barbituates Cocaine (including Crack)	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines Barbituates Cocaine (including Crack) GHB Hallucinogens (other than	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines  Barbituates  Cocaine (including Crack)  GHB  Hallucinogens (other than LSD)	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines  Barbituates  Cocaine (including Crack)  GHB  Hallucinogens (other than LSD)  Heroin	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines Barbituates Cocaine (including Crack) GHB Hallucinogens (other than LSD) Heroin Hydrocodone	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines Barbituates Cocaine (including Crack) GHB Hallucinogens (other than LSD) Heroin Hydrocodone Inhalants	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem
Amphetamines Barbituates Cocaine (including Crack) GHB Hallucinogens (other than LSD) Heroin Hydrocodone Inhalants LSD	(check	all that apply)	4 = fourth biggest problem 5 = fifth biggest problem

Methamphetamine (including Ice)	
Nitrites	
Oxycodone (Oxycontin)	
PCP	
Prescription Drugs (other than Hydrocodone and Oxycodone)	
Rohypnol (date rape drug)	
Steroids	
Tobacco	
Tranquilizers	
Other:	
Other:	

#### APPENDIX D

### 2008 CADCA Annual Survey of Coalitions

#### 2008 ANNUAL SURVEY OF COALITIONS

### **Overview**

The aim of CADCA's Annual Survey of Coalitions (formerly the National Coalition Registry) is to identify coalitions around the country and learn more about what they are doing in their communities to address substance abuse problems. By adding your voice to the Annual Survey of Coalitions, you will provide critically needed information that will advance the coalition field and help inform CADCA of training and technical assistance needs that are vital to your coalition. The Annual Survey will serve as a single source where coalitions, policymakers, researchers and practitioners can access up-to-date information on coalitions. Thank you for taking time to join the movement and making sure your coalition is counted in CADCA's Annual Survey of Coalitions!

Different types of audiences will have different types of access to the information in the Annual Survey. Audiences with access include coalitions who complete the Annual Survey, CADCA staff, researchers and federal partners. Coalitions who complete the Annual Survey will have a unique user ID and password so they can access information collected in the Survey. They will be able to view summary tables pertaining to coalition demographics, descriptions, strategies and interventions. Survey coalitions that are also current CADCA members will be able to view all this information plus have access to customizable reports that will allow them to network with other Annual Survey coalitions in the country. Finally, as is appropriate, states, federal partners and other government agencies, researchers and CADCA staff will have access to survey data and results.

#### **General Instructions**

CADCA's Annual Survey of Coalitions will take approximately 30 minutes to complete and asks questions regarding your coalition's characteristics, activities and focus. We are requesting that the person in charge of the day-to-day operations of your coalition (director, CEO, executive director, etc.) fill out the Annual Survey; however, we understand that it may make sense for another person to fill out portions of the Annual Survey.

Please answer Annual Survey from the perspective of the coalition you represent:

- If your coalition is the umbrella coalition or lead coalition (i.e., coalition of coalitions), please answer from that perspective DO NOT ANSWER ON BEHALF OF THE COALITIONS YOU LEAD.
- If your coalition is an affiliate within a network of coalitions or a freestanding coalition, please answer from that perspective.

Survey P	r <u>izes</u>
Complete	* the Annual Survey by December 18, 2008 and your coalition is eligible to
win:	
o	Free 2009 CADCA National Leadership Forum registration (2 prizes)
Complete	* the Annual Survey by January 31, 2009 and your coalition is eligible to win
one of the	following prizes:
o	Free 2009 Mid-Year Training Institute registration (2 prizes)

- Digital camera (2 prizes)
  Ipod Shuffle (1 prize)

Please	read	the	follo	wing	and	put	your	initials	in	the	box:

Please read the following and put your initials in the box:
I have read the above information, understand the purpose and use of the information, agree to the above standards about the sharing of my coalition's information with the public, and give my consent to participate in the CADCA Annual Survey of Coalitions.
Notice - The Annual Coalition Survey is administered and maintained by CADCA. The collection of information for the Annual Coalition Survey is estimated to average 60 minutes per respondent, including the time for reviewing instructions, searching existing data sources, completing and reviewing the information. Send comments regarding the Annual Coalition Survey to CADCA, Annual Coalition Survey, 625 Slaters Lane, Suite 300, Alexandria, VA 22314 or contact us at 1-800-54-CADCA or registry@cadca.org.
Please check this box if your coalition is no longer active. You do not have to complete the Annual Coalition Survey but we ask that you contact CADCA at <a href="mailto:registry@cadca.org">registry@cadca.org</a> or 800-542-2322, ext. 243 to let us know. If your coalition should resume in 2009, please contact us so you can be counted in the 2009 Survey.
*Please note – all items with an asterisk* are required in order for your coalition to be included in the 2008 Annual Survey of Coalitions.
GENERAL COALITION CONTACT INFORMATION
Coalition Name:
Mailing Address:
City:
State:
Zin+4 (i.e. 22314-1212):

County:	Country:
Phone: ()	Ext
Fax: ()	Don't have
E-mail:	Don't have
Web site:	Don't have
Is your street address the same as your n	nailing address?
YesNo	
IF <b>YES</b> , PLEASE SKIP TO THE NEX' IF <b>NO</b> , PLEASE PROVIDE YOUR ST	
Street Address (if different from above):	
City:	
State:	
<b>Zip+4</b> : (i.e., 22314-1212):	<del></del>
PRIMARY RESPONDENT INFORMAT	<u>ΓΙΟΝ</u>
(director, CEO, executive director, etc.) fill	of the day-to-day operations of your coalition out the Survey (however, we understand that out portions of the Survey.) Please provide
Name (i.e., Ms. Joan Smith):	
Phone: ()	Ext
E-mail:	Don't have
What is your title?	
How long have you held this position? Start Month Start	Year

Are you responsible for the day (i.e., you are the coalition leader	-			-	of the coa	lition?
YesNo						
If you are not the director, who applicable)?	at is the	e name	e of the d	irector of y	our coalitic	on (if
COALITION DIRECTORY O	UEST	<u>IONS</u>				
3. *Which of the following be (check one only)	st desci	ribes t	he focus/a	activities of	your coali	tion?
Mission focused solely specific)ATOD issues as part ofNo focus on ATOD issues	a broad	·			ug issues (A	ATOD
2. *Are any of the following organizations/groups represe coalition?	nted on	your	CH deg cor	LEASE ANSV ECKED YES gree does the o stribute to yours?	S IN ITEM 2. organization/	To what group
	YES	NO		2 3	<ul><li>Not at all</li><li>Not very m</li><li>Somewhat</li><li>A great de</li></ul>	
Alcohol beverage control			1	2	3	4
Alcohol industry			1	2	3	4
Business groups			1	2	3	4
Child protective services			1	2	3	4
Citizen action groups			1	2	3	4
Civic/fraternal organizations			1	2	3	4
Community organizations (e.g., grass roots groups, ethnic organizations, special populations)			1	2	3	4
Courts			1	2	3	4
Elected officials			1	2	3	4
Employment services			1	2	3	4
Faith community			1	2	3	4
Government - county			1	2	3	4
Government - federal (e.g., DEA,			l	2	3	4

NHTSA)

2. *Are any of the following organizations/groups represented on your coalition?			3. *PLEASE ANSWER IF YOU CHECKED YES IN ITEM 2. To wha degree does the organization/group contribute to your coalition's strategi efforts?			To what	
		YES	NO		2 = 3 =	= Not at all = Not very m = Somewhat = A great de:	
Governmen	t - local			1	2	3	4
Governmen	t – state			1	2	3	4
Governmen	t - tribal			1	2	3	4
Health				1	2	3	4
Hospital(s)				1	2	3	4
Housing aut	hority			1	2	3	4
Human Serv	vices			1	2	3	4
Institutions	of higher learning			1	2	3	4
Labor				1	2	3	4
Law enforce	ement			1	2	3	4
Local gover	nment executives			1	2	3	4
Mass media				1	2	3	4
Military Services (e.g., Air force, Army, Marines, Navy)				1	2	3	4
National Gu	ard			1	2	3	4
Parents				1	2	3	4
Prevention p	providers/centers			1	2	3	4
Private Citiz and youth)	ens (other than parents			1	2	3	4
Probation				1	2	3	4
Public assist	ance			1	2	3	4
Public Healt	th			1	2	3	4
Recovery co	ommunity			1	2	3	4
Recreation of	lepartment			1	2	3	4
	Elementary School			1	2	3	4
Schools (K-12)	Junior High/ Middle School			1	2	3	4
	High School			1	2	3	4
State ATOD	agency (SSA)			1	2	3	4
Transportati	on			1	2	3	4
Treatment p	roviders/centers			1	2	3	4
Volunteer or	rganizations			1	2	3	4
Youth				1	2	3	4
Other:				1	2	3	4

	2. *Are any of the following organizations/groups represented on your coalition?  YES NO		our/	3. *PLEASE ANSWER IF YOU CHECKED YES IN ITEM 2. To wh degree does the organization/group contribute to your coalition's strates efforts?				
			YES	NO		1 2 3	= Not a ! = Not v ! = Some ! = A gre	ery much
(	Other:	-			1	2		3 4
4.	*In the last 12 mor	nths, ha	ive new n	nembe	ers joined y	our coal	ition?	
	Yes	No						
5.	*In the last 12 more representatives (e. takes his/her place	g., chie			-	•		a new chief
	Not at all		very muc applicab		Somew	hat		_A great deal
6.	*In the last 12 more be more actively in	-	_	_	•	-engaged	existin	ng members to
	Not at all _		very mu		Somew	hat		_A great deal
7.	*In the last 12 mor coalition members	-	•	_	•			•
	Not at all		very mu		Somew	hat		_A great deal
8.	*To what extent dethnicity, religion, composition of you	gender	, age, sex	ual or		-		•
	Not at all deal	Not	t very mu	ch _	Somew	hat		A great
	. *To what extent wou disagree or agree wit following?	th the	STRON DISAG		DISAGR	EE A	GREE	STRONGLY AGREE
	Coalition members share a common vision for the							
C	o <b>mmunity</b> .							
	he coalition has an effect onflict resolution process	1						

The coalition has a feeling of							
cohesiveness and team spirit.							
Coalition members trust each							
other sufficiently to honestly							
share information, perceptions							
and feedback.  The coalition uses collaborative							
decision-making processes.							
decision-making processes.	<u> </u>	<u> </u>	<b>!</b>				
10. *Some coalitions focus on of their community envir describes the current stat describes your coalition to	onment. Which	of the following	ng do you th	ink best			
<b>,</b>							
Exclusively providing services	g or coordinating	g the provision	of prevention	n programs or			
Primarily providing of		•	•	rograms, with			
some involvement in	environmental o	r policy change	•				
About evenly split be	tween preventio	n programs/ser	vices and en	vironmental			
change							
Primarily focusing or	n environmental	or policy chang	ge, with some	e involvement			
in prevention program	is and services						
Exclusively focusing	on environment	al or policy cha	inge.				
11. *When was your coalition	n first started?						
·							
Month	Year	Don't Kn	ow				
12. *How does your coalition	identify itself (	i.e., which defir	nitions best r	eflect your			
coalition regarding scope)							
0 0 17	•	11 07					
Faith-based							
Prevention-focused							
Primarily serving a sp	ecial population	(s) (e.g., Latino	vouth, refus	zee community.			
people with disabiliti		()(0)	, ,	J .			
<u> </u>	ify the special po	onulation(s) that	t vou work				
:41							
School-based			<del></del>				
Serving an economica	ally disadvantage	ed community					
Recovery-focused	my disadvantage	a community					
Treatment focused							
Other (specify)							
Other (specify)							
			_				
13. *Which category BEST d			•	- '			
O':							
City							

Congressional D	istrict		
County			
Indian Reservati	on		
Neighborhood/C	Community		
Multiple Counti	=		
Multiple Neighb			
School District			
School Site	•		
Multiple School	Sites		
Regional			
Statewide			
Other (please sp	ecify)		
14. *What best describe	es your geographic	target area? (chec	ek one only)
Frontier	Rural	Suburban	_Urban
Entire Area Sub-Population	• •		coalition (e.g., American
16. *What was your CO fiscal year?	OALITION's (not f	iscal agent) annua	l budget for the last
Do not have a b	udget		
\$9,999 or less	•	\$1.000	),000 to \$1,999,999
\$10,000 to \$49,9			),000 to \$2,999,999
\$50,000 to \$99,9			0,000 to \$3,999,999
\$100,000 to \$19			),000 to \$4,999,999
\$200,000 to \$29			),000 to \$9,999,999
\$300,000 to \$39			00,000 to \$14,999,999
\$400,000 to \$49	•		00,000 to \$19,999,999
\$500,000 to \$99	•		00,000 and above
17. *How many full-tim drug activities, inclu coalition)? (check or	iding in-kind staff		cohol, tobacco or other one else to work at your
NoneFew		- 56 - 7 than 20	8 – 10

cos	alition's a	ctivities/str	EERS on average ategies? (Volunte your coalition) (cl	er: someone	who does no	icipate in your t get paid a salary
	_None	1-5	6-10	11-25	26-50	
	More th	an ou				
19. Ho	w would y	ou best de	escribe your coal	ition? (checl	k one only)	
	_Novice		Intermediate		Advanced	
INSTI	TUTE TR	RAININGS	S, TECHNICAL	ASSISTAN(	CE & PUBL	ICATIONS
	•		d any contact with the last year?	th CADCA	or CADCA's	National
	_Yes _	No	Don't know			
			OW, PLEASE CO TO ITEM 27.	ONTINUE O	N TO ITEM	21.
21. *W	hat type	of contact	did your coalitio	n have? (che	eck all that a	pply)
	CADCA	Leadershi	p Forum			
			sistance (via phon			
			Training Institute	•		
	Training					
	Member	-				
	Web site Publicat					
		lons Coaching				
		•	web-based learning	va)		
	Other (s	pecify)			<del></del>	
	(					
For ite	ems 22-33,	please ref	lect back on the	training, tec	hnical assist	ance and
public	ations you	ır coalitior	has received fro	m CADCA	CADCA's N	ational Coalition
<u>Institu</u>	te in the l	ast 12 mor	<u>iths.</u>			
Te		ssist <b>anc</b> e o	g the information r CADCA/Institu			
	Not at al	11	Not very much	Somewl	nat _	A great deal

	Not applicable		
•	u describe your coali nce or CADCA/Insti		s a result of training,
Less effectiveNot applicable	<del></del>	ngeMore o	effective
24. *Has training an people in your c	nd technical assistance oalition?	ce information been	shared with other
Not at all	Not very muchNot applicable		A great deal
25. *Are the individ on your coalition		ed/received technica	l assistance still involved
AllMos	tSomeN	loneNot app	licable
others in your c	tion share training anomunity (outside o	f the coalition memb	ership)?
Not at all	Not very muchNot applicable		A great deal
<b>Publications</b>			
	tion received any cor ite (e.g., SPF Primer		ADCA/National ment, etc.) in the last
Yes	No	Don't know	
	your coalition read a ty Primer, Cultural C book, etc.)?	_	, • .
Yes	No	Not applicable	e
Capacity Prime	tion shared any of th r, Cultural Compete with other commun	nce Primer, Evaluat	ion Primer, Coalition
Not at all	Not very much Not applicable		A great deal

30. *How useful have these pu Cultural Competence Prin been to your coalition's wo	ner, Evalua			
Not at allNotNot	very much applicable	Som	ewhat	_A great deal
For items 31-31, please think training, technical assistance, CADCA/National Coalition In	publication	•		
31. *To what extent is your co decision-making practices		_	ces and supports t	o inform
<del></del>	very much applicable		ewhatA	great deal
32. *To what extent have the scapacity to effectively addressed (check one only)			-	
	very much applicable	Som	ewhatA	great deal
33. *In general, how satisfied has received from CADCA	•			our coalition
Very satisfied				
Somewhat satisfied				
Somewhat dissatisfied				
Very dissatisfied				
None received				
COALITION PROCESSES				
34. *Please indicate how your		Involvement	in Activity in the last	12 months
coalition has been involved			check all that apply)	
(either directly or in partnersh				
in each of the following activiting the last 12 months.	<u>ies</u>			
TYPE OF ACTIVITY	Not done	Initiated	Revisited/Modified	Completed
	ess communi	ty needs & re	esources	
Collected local data on the readiness				
your community/system to select and implement strategies found to be	1			
effective in addressing substance abu	ise.			

34. *Please indicate how your coalition has been involved (either directly or in partnership) in each of the following activities in the last 12 months.					
TYPE OF ACTIVITY	Not done	Initiated	Revisited/Modified	Completed	
Collected local data to determine or					
monitor the extent of substance abuse					
problems in the community (Needs					
Assessment).					
Collected local data on risk and					
protective factor predictors for					
substance abuse and other related				ĺ	
_problems.					
Collected information on resources that					
are available to address identified					
community problems.					
Collected information on your					
community's history (e.g., major					
events/forces that have affected the					
community and/or influenced targeted					
outcomes)					
Defined the geographic boundaries of					
the coalition's target community.					
Identified the demographics of the people within the coalition's target					
community.					
Developed a clear statement or set of					
statements that define the true				1	
_concerns/problem(s) in the community.					
	lyze pro	blems and go	als		
Facilitated a group problem analysis to					
explore the complex issue of substance					
abuse in the community					
Incompared the comparison and					
Incorporated the experience and expertise of coalition members to					
thoroughly name and frame problems					
and goals					
Identified local conditions (personal	1				
and environmental) that maintain risk					
or build protection in your community.					
Used data to prioritize substance abuse					
needs.					
Developed a	framew	ork or model	of change		
Developed a logic model for what the coalition will accomplish.	ĺ				
Improved the logic model based on new					
information about the community and					
the coalition's efforts.	1				
Ensured consensus for the logic model					
Ensured the logic model reflects the					
culture and values of the community.					
		1			

34. *Please indicate how your coalition has been involved (either directly or in partnership) in each of the following activities in the last 12 months.						
TYPE OF ACTIVITY	Not done	Initiated	Revisited/Modified	Completed		
Devel	op strate	egic & action	plans	•		
Developed population-level						
strategies/activities for changing		<u> </u>				
community conditions and behaviors.						
Linked coalition assets and resources to						
identified community needs.						
Developed an action plan that identifies						
who, will do what, by when to realize	ł					
targeted community changes.						
	ant and	implement in	terventions	<u> </u>		
Matched prioritized substance abuse	pr una			1		
needs with evidence-based policies,	1					
program and practices.		Ì				
Developed local responses that employ						
multiple strategies in response to						
identified needs						
Prioritized needed community and						
systems changes						
Advocated for the adoption of needed						
community and systems change.						
Developed a plan that ensures a truly				† · · ·		
comprehensive response to substance						
abuse.						
	Evaluate	the coalition	1			
Developed a local group/committee to						
oversee local data collection and/or						
analysis						
Based on the coalition's logic model,						
identified workable measures of success						
Developed or selected instruments and						
methods to assess outcomes.						
Identified stakeholder concerns that						
must be addressed as part of the		ŀ				
evaluation						
Collected data to monitor the						
implementation of programs/strategies.						
Collected data to assess		1				
immediate/intermediate outcomes of						
programs/strategies.						
	<b></b>					
Collected data on community changes		1				
(new or expanded polices, programs or		1				
practices brought about by the						
coalition)				ļ		
Collected data to assess long-term						
outcomes of programs/strategies.						
Distributed the work of coalition						

34. *Please indicate how your coalition has been involved (either directly or in partnership) in each of the following activities in the last 12 months.					
TYPE OF ACTIVITY	Not done	Initiated	Revisited/Modified	Completed	
evaluation appropriately among members and staff					
Made changes to programs/strategies based on evaluation data.					
Disseminated coalition evaluation results and monitoring data to key community stakeholders.					
Re-designed evaluation methods and/or measures to collect better/additional information.					
Sust	ain proj	ects & initiat	ives		
Used data as a basis for new grants or funding proposals.					
Identified what must be sustained.					
Identified what resources (e.g., supplies, space, personnel, transportation, technical assistance and funding) are required to sustain identified needs.					
Created case statements that clearly identify what must be sustained, why and how.					
Determined how the coalition plans to provide or develop needed resources to fund the identified needs.					
Identified potential partners that will be needed or recruited to help support each identified need.					
Action planned what will be done to contact potential partners, when each task will be accomplished and what resources will be required to contact and present to potential partners					

COALITION PLANNING PRODUCTS	35. *How often do you use the product to inform the decisions of your coalition?  1 = Not at all  2 = Not very often  3 = Somewhat  4 = Frequently  5 = Always  N/A = Don't have this product  Please circle your response below		36. *Did you develop OR revise this product in the last 12 months?  Please circle your response below		37. *In the last 12 months, did you develop OR revise this product as a result of the training or technical assistance you received from the CADCA Institute? Please circle your response below					
Community Assessment	1	2	3 N/A	4	5	YES	NO	YES	NO	DON'T KNOW
Logic Model	1	2	3 N/A	4	5	YES	NO	YES	NO	DON'T KNOW
Strategic / Action Plan	1	2	3 N/A	4	5	YES	NO	YES	NO	DON'T KNOW
Sustainability Plan	1	2	3 N/A	4	5	YES	NO	YES	NO	DON'T KNOW
Evaluation Plan	1	2	3 N/A	4	5	YES	NO	YES	NO	DON'T KNOW

38. * Please rate the degree to which each product is a comprehensive, effective planning tool for the coalition?	ehensive, 2 = Not very much			elow	
Community Assessment	1	2	3	4	N/A
Logic Model	1	2	3	4	N/A
Strategic / Action Plan	1	2	3	4	N/A
Sustainability Plan	1	2	3	4	N/A
Evaluation Plan	1	2	3	4	N/A

# **COALITION STRATEGIES**

39. *To what extent did your coalition engage in the following strategies in the LAST 12 MONTHS?	2 = 3 = 4 = Pl	Some A gre lease o	ery m	l our
<b>Providing information</b> - Educational presentations, workshops or seminars, and data or media presentations (e.g., public service announcements, brochures, billboard campaigns, community meetings, town halls, forums, Web-based communication).	1	2	3	4
Enhancing skills - Workshops, seminars or activities designed to increase the skills of community members, such as youth, parents and citizens (e.g., training, parenting classes, evidence-based prevention programs for youth).	1	2	3	4
<b>Providing support -</b> Creating opportunities that reduce risk or enhance protection (e.g., providing alternative activities, mentoring, support groups, youth clubs, parenting groups, Alcoholics or Narcotics Anonymous).	1	2	3	4

39. *To what extent did your coalition engage in the following strategies in the LAST 12 MONTHS?		1 = Not at all 2 = Not very much 3 = Somewhat 4 = A great deal Please circle your response below				
Enhancing access/reduce barriers - Improving community and service delivery processes to increase the ease, ability and opportunity for community members to access and use the services (e.g., access to treatment, childcare, transportation, housing, education, special needs, cultural and language sensitivity).	1	2	3	4		
Changing consequences – Using incentives and disincentives to alter consequences of a specific behavior (e.g., increasing public recognition for deserved behavior, individual and business rewards, taxes, citations, fines, revocations/loss of privileges).	1	2	3	4		
Changing the physical design of the environment - Altering the physical structure of the community so that individuals are less likely to engage in substance use (e.g., parks, landscapes, signage, lighting, outlet density).	1	2	3	4		
Modifying/changing policies – Working to create formal changes in written procedures, by-laws, proclamations, rules or laws with written documentation and/or voting procedures (e.g., public policy actions, systems change within government, communities and organizations).	1	2	3	4		

### **COMMUNITY CHANGES**

# Policy/Practice Change

W.	"We Card" signs or coalition facilitates the development and passing of a city ordinance that requires Responsible Beverage Server Training for all alcohol retailers in the city)?
	YesNo
	IF <b>YES</b> , PLEASE CONTINUE ON TO ITEM 41. IF <b>NO</b> , PLEASE SKIP TO ITEM 44.
1.	*In the last 12 months, approximately how many NEW or MODIFIED policy or practice changes did your coalition help bring about?
	number
12.	*In which sectors were you able to bring about the policy/practice changes? (Check all that apply)
	NonprofitBusinessGovernment/law

	Education/s	chool		
	Community	/		
	Health			
	Social servi	ces		
	Media			
	Family and	caregiver		
	Religious	Ü		
	Youth			
43.	*Who were the	e targets	of these	policy/practice changes? (check all that apply)
	Youth			
	Parents and	caregiver	rs	
	Families			
	Community	leaders		
	General cor	nmunity		
Pro	ogrammatic Ch	ange		
	<del>-</del>	_		ogram or coalition works with partner to modify a Spanish-language version)?
	Yes	N	10	
	IF <b>YES</b> , PLEAS IF <b>NO</b> , PLEAS			ON TO ITEM 45. 1 48.
45.				mately how many NEW or MODIFIED lp bring about?
	numbe	er		
46.	*In which sect	ors were	you able	e to bring about the program changes? (Check all
	that apply)			
	Nonprofit			
	Business			
	Governmen			
	Education/s			
	Community	/		
	Health			
	Social servi	ces		
	Media	Á		
	Family and	caregiver	<u>.</u>	

	Religious			
	Youth			
47.	*Who were the	targets of these program	nmatic changes? (	check all that apply)
	Youth	•		
	Parents and o	caregivers		
	Families	<b>C</b>		
	Community	leaders		
	General com	munity		
		the community change ces) your coalition has b		
		t are these community c nce abuse problems?	hanges addressing	g the reduction of
	Not at all	Not very muchNot applicable	Somewhat	A great deal
		t are these community of factors associated with y	•	•
	Not at all	Not very muchNot applicable	Somewhat	A great deal
		t are these community cour targeted substance a		g local conditions that
	Not at all	Not very muchNot applicable	Somewhat	A great deal
<u>Otł</u>	ner Community	Changes		
	*To what exten abuse reduction	t are your community's a efforts?	norms shifting to	support substance
	Not at all	Not very much	Somewhat	A great deal
52.	*To what exten	t has your coalition play	ed a role to shift t	hese norms?
	Not at all	Not very much	Somewhat	A great deal
	*To what degree	e is your coalition meet	ing the unique der	nographic and cultura

Not at allNot very muchSomewhat		at	A	great d	eal	
54. *Is your coalition meeting to the work your coalition		anizations (	to shar	e ideas :	and get	buy-ir
Not at allNot	very much	Somewha	at	A	great d	leal
55. *Overall, how effective do you following?	think your coaliti	on is at the	2 = S 3 = E 4 = E	neffective omewhat ffective xtremely e circle ye	effective	<b>;</b>
Working strategically.			1	2	3	4
Making decisions.			1	2	3	4
Working comprehensively to address problems.	your local substan	ice abuse	1	2	3	4
Resolving conflict.		1	2	3	4	
Getting members engaged in the wor	k.		1	2	3	4
Reducing population-level substance	abuse problems.		1	2	3	4
56. *To what extent do you think that your community members (outside the coalition membership) agree with the following:	They would STRONGLY AGREE	They would AGREE		y would AGREE	STRO	would ONGLY GREE
The coalition is a community						
change agent.			1			
The coalition is a community						
problem solver.						
The coalition is a service provider.		<u> </u>				
The coalition is focused on						
environmental strategies.			ļ			-
The coalition is focused on						
individual-level change initiatives.		-	ļ		<del> </del>	
The coalition is focused on			1			
population-level reductions in						
community substance abuse						
problems.	l	1			1	

# **SUSTAINABILITY**

	57. *What sources of funding/resou rces support your coalition and its strategies?  (check all that apply)	58. Please rank the talengest sources of funding/resource (THAT YOU CHECKED IN I' 41) that support coalition and its strategies.  (1 = highest level of further strategies are thighest level of further funding, etc.)	f g s s fi TEM o your tl c in unding,	Did you et a new ource of unding in ne of hese ategories n the last ear? k all that
Asset forfeiture		runding, etc.)	арріу	,
City government				
Corporate or Business				
County government				
Federal government				
Foundations				
Fundraising				
In-kind contributions				
Non-profits (e.g., United Way)				
Private donations				
State government				
Sales of products or Dues				
Other (specify) NONE				
60. Does your coalition lyour funds)?	nave a fiscal agent ( No	i.e., an organization	/entity that a	dministers
61. Has your coalition b status)?	een granted nonpro	ofit status by the IR	<b>S</b> (e.g., has 5	501(c)3
Yes	No			
62. Has your coalition rece programs? (check all that apply)	ived funding from any	of the following	Currently (2008-2009)	In the pas (Before 2008)
Drug Free Communities Supp	port Program			

Drug Free Communities Support Program Mentoring Grant	
Community Capacity and Development Office (formerly the Executive Office of Weed and Seed)	
Office of Juvenile Justice and Delinquency Prevention (OJJDP) Underage Drinking Initiative	
Safe and Drug Free Schools (local; state grant portion of the 20% set-aside; or national)	
Substance Abuse Prevention and Treatment (SAPT) Block Grant	
SPF/SIG Sub-recipient	
STOP Act Grant	
Traffic Safety Funding (local or state)	
Centers for Application of Prevention Technologies (CA Centers for Disease Control and Prevention (CDC) Center for Substance Abuse Prevention (CSAP) Center for Substance Abuse Treatment (CSAT) Departments/Systems in your state Enforcing the Underage Drinking Laws (EUDL) Program National Clearinghouse for Alcohol & Drug Information National Guard National Highway Traffic Safety Administration (NHTS National Institute on Alcohol Abuse and Alcoholism (NIMIS) National Institute on Drug Abuse (NIDA) NONE	n (OJJDP/PIRE) (NCADI)
COALITION INDICATORS AND ACTIVITIES  64. *Does your coalition collect data on the following youth su outcome indicators? (check all that apply)	ıbstance abuse
Age of first usePerception of disapproval by parentsPerception of risk or harm30-Day UsePerceived availability	
65. *Does your coalition collect/utilize any of the following so (check all that apply)	cial indicator data?
Alcohol consumption/sales dataAlcohol/drug-related traffic fatalities dataAlcohol outlet density data	

on data
ning Network (DAWN) data
data
of Substance Abuse Treatment Services (formerly the Uniform
on Drug Use & Health data (formerly the National Household
g Abuse)
do you use to collect your student survey data? (check all
g and Alcohol Survey (ADAS)
That Care Survey (CTC) or the CSAP Substance Abuse Risk
Factor Student Survey (SARPF)
e's Developmental Assets Survey
PRIDE)
ehavior Survey (YRBS)
rom the CSAP Core Measures Initiative
nsored/developed by your state
pecify the name of your state
your coalition or community created/developed for your own
)
)
collecting survey data in your community?
Don't know/Does not apply
have an evaluator (paid or volunteer)?

	69. Does your coalition collect data on any of the following substances? (Check all that apply)	70. Based on available, verifiable data (e.g., Health Department data, substance abuse incidence/prevalence data, Emergency Room data, etc.), which of the following are currently causing the most problems in your community?  1 = the biggest problem 2 = the next biggest problem 3 = the third biggest problem 4 = fourth biggest problem 5 = fifth biggest problem	71. Please indicate which of the following substances your coalition is currently address? (Check all that apply)
Alcohol			
Amphetamines			
Barbiturates			
Binge Drinking			
Cocaine (including Crack)			
Cough Medicine (DXM)			
GHB			
Hallucinogens (other than LSD)			
Heroin			
Hydrocodone			
Inhalants			
LSD			
Marijuana			
MDMA (Ecstasy)			
Methamphetamine (including Ice)			
Nitrites			
Oxycodone (Oxycontin)			
PCP			
Prescription Drugs (other than Hydrocodone and Oxycodone)			
Rohypnol (date rape drug)			

Steroids		
Tobacco		
Tranquilizers		
Other:		
Other:		
NONE		

72. Please indicate if your coalition was involved in any of the following interventions in the past 12 months.	YES	NO
Media public awareness SPECIFICALLY for ALCOHOL problem reduction, such as: posters, public service announcements, advertisements, commercials and		
billboard campaigns		
Media public awareness for substance abuse problem reduction, such as: posters, public service announcements, advertisements, commercials and billboard campaigns		
Recovery Month Activities		
National Medicine Abuse Awareness Month Activities		
Town hall meetings		
Media advocacy, media literacy and social marketing activities linked SPECIFICALLY to ALCOHOL problem reduction such as: counter marketing or counter-advertising.		
Media advocacy, media literacy and social marketing activities linked to substance abuse reduction		
Increasing access to treatment		
Recovery support activities such as: sober housing, peer support, relapse prevention or employment.		
Re-entry support activities for offenders returning from incarceration		
Screening, brief intervention and referral to treatment (SBIRT) activities such as substance abuse assessment in the emergency room, primary care offices, etc.		
Increasing effectiveness of substance abuse treatment		
Development of workplace programs or policies to address substance abuse		
Increasing access to services (e.g., providing or improving transportation and childcare)		
Improving cultural and language sensitivity of activities/services provided in the community (e.g., translating brochures, offering services/activities in other languages, etc.)		
"Shoulder-tap" enforcement program	1	
Compliance checks for alcohol or tobacco sales to underage individuals		
License revocation for tobacco or alcohol sales violations		
Increased fines for tobacco and alcohol sales violations		
Increased checks for fake IDs		
Enforcement of community laws and policies that discourage substance abuse, such as: neighborhood watch and increased enforcement of underage drinking laws)		
Community policing programs or services, for example: officers who are out in the neighborhood working with residents on crime prevention		
Rewards/incentives for deserved behavior (e.g., public recognition of retailers that pass compliance checks, business/individual rewards, etc.)		

72. Please indicate if your coalition was involved in any of the following interventions in the past 12 months.	YES	NO
Alcohol and cigarette marketing/advertising restrictions in public places		
Limiting or changing alcohol or tobacco product placement in retail outlets		
Limitation and restrictions of location and density of alcohol outlets		
Neighborhood improvement such as: improved lighting in public places or landscaping		
Limiting the number of alcohol licenses issued		
Restrictions on alcohol and/or tobacco use at community events		
Responsible beverage service training		
Development of community laws and policies that discourage substance abuse such as: restricting amounts of problem Over the Counter drugs (OTC) sold or policies to place problem OTCs behind counters  Implementation of a social host ordinance		
Implementing keg registration policies		
Implementing DUI checkpoints		
Worked with other entities or coalitions to change state and/or national policies such as: increasing tax on alcohol/tobacco and reallocation of fines to prevention for alcohol and tobacco sales violations		
Systems change within government, communities and organizations (e.g., policy/practice changes within community institutions such as schools and businesses)		
73. *Are you a current member of CADCA?		
YesNoI don't know		
IF <b>YES</b> , PLEASE CONTINUE ON TO ITEM 74. IF <b>NO or DON'T KNOW</b> , PLEASE SKIP TO ITEM 76.		
74. *How satisfied are you with your CADCA membership? (check of	ne)	
Very satisfied Satisfied Somewhat satisfied Somewhat dissatisfied Dissatisfied		
75. *What are the primary reasons you are a CADCA member? (Ple top 5 in order of importance with 1 = most important and 5 = least		
Advocacy and public policy informationDiscounts and scholarship opportunitiesNational Leadership Forum and Mid-Year Training Institute		

The Nation	al Community Anti-Dr	ug Coalition Institute	
Professiona	al development for me	and my staff.	
Networking	g opportunities provide	d.	
CADCA pr	ovides national represe	entation for coalitions	
	ograms (e.g. Office Dep		
•	l NO or I DON'T KN ceiving information a	<del>-</del>	
Yes	_No		
77. What CADCA	communications tools	do you utilize? (che	ck all that apply)
	Web site, www.cadca.c	org	
CapWiz for	r public policy		
	Online, CADCA's weel	•	
Strategizer	and Practical Theorist	publications	
Satellite bro	oadcasts/webcasts		
78. What values do	you think CADCA re	epresents most? (che	eck only three)
□ ambition	□ trustworthy	□ authentic	□ equality
□ integrity	□ service	$\Box$ responsibility	□ respect
□ dedication	□ diversity	□ improvement	□ fun
□ dynamic	□ credibility	□ honesty	□ innovative
□ teamwork	□ excellence	□ accountability	□ empowerment
□ high quality	□ efficiency	□ strong	□ collaboration
□ reliable	□ accomplishment		□ independence
□ challenge	□ influence	□ learning	□ compassion
□ simple	□ persistency	□ optimism	□ dependability
□ flexibility			

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