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## THE NATIONAL JUVENILE FIRESETTER/ARSON CONTROL AND PREVENTION PROGRAM

ASSESSMENT REPORT EXECUTIVE SUMMARY

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## ACQUISITIONS

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### PREFACE

This report is the Executive Summary of The National Juvenile Firesetter/Arson Control and Prevention Program Assessment Report. The report summarizes the results of Stage I of a four stage program, the assessment of the incidence and dynamics of juvenile firesetting and juvenile firesetter programs. Prototype models of juvenile firesetter programs and technical assistance materials will be developed in the later stages of the program. For a copy of the full report, please write the Institute for Social Analysis, 1625 K Street, N.W., Suite 1000, Washington, D.C., 20006.

#### ACKNOWLEDGEMENTS

Several individuals and numerous organizations contributed to this Executive Summary.

We thank Travis Cain and Richard Sutton of the Office of Juvenile Justice and Delinquency Prevention, and Tom Minnich of the U.S. Fire Administration for recognizing the seriousness of the juvenile arson problem and for persisting in efforts to gain federal support for this important development initiative. They continue to provide helpful guidance to the project. Cliff Karchmer and his able colleagues at the Police Executive Research Forum conducted the initial analysis of program survey information and gathered valuable information on the response of the justice system to juvenile firesetting and arson. We especially appreciate the fine work of Dr. Patricia Parham, who conducted six of the program site visits and contributed numerous insights to our knowledge of juvenile firesetter programs.

Without the unfailing cooperation of the staff of the many juvenile firesetter programs surveyed and visited during this assessment stage, this report would not have been possible. The staff of the thirteen programs visited by ISA were particularly generous of their time and materials, and we wish to thank all of them.

## I. Introduction

In Passaic, New Jersey, a firefighter was killed and hundreds of people lost their homes in a fire started by a group of teenage boys. In Roanoke, Virginia, a seven year old boy set fire to a chair in an abandoned building. The fire spread to an adjacent house and trapped an elderly woman. In Rochester, New York, a two year old, playing with matches, started a fire that took his life and the lives of five family members.

Unfortunately, these tragic events are not isolated incidents, but are repeated virtually every day in cities across the United States. Fires set by juveniles take a tremendous toll in property losses, personal injuries, and death each year in this country. Whether the result of a curious child playing with matches or the malicious act of a troubled delinquent, juvenile firesetting is a serious and vexing problem that requires a special response from the community and the criminal justice system.

In recognition of the seriousness of the juvenile firesetting problem, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) in conjunction with the U.S. Fire Administration (USFA) is sponsoring the National Juvenile Firesetter/Arson Control and Prevention Program being conducted by the Institute for Social Analysis (ISA) and the Police Executive Research Forum (PERF). The purpose of this development program is to assess, develop, test, and disseminate information on promising approaches for the control and prevention of juvenile firesetting and arson.

The two-year program, which began in early 1988, is divided into four incremental stages:

- 1. An assessment of the incidence and dynamics of juvenile firesetting/arson and selected juvenile firesetter programs throughout the United States.
- 2. The comprehensive documentation of model approaches to controlling juvenile arson, including descriptions of program development, implementation, and operation
- 3. The development of training and technical assistance packages to provide local jurisdictions with the necessary information to implement appropriate programs.
- 4. Testing of the program models and dissemination through training and technical assistance packages.

ISA will be assisted during the development project by the National Juvenile Arson Public/Private Partnership, a group composed of diverse individuals from both the public and private sector who have a special expertise and interest in juvenile arson. Following the development project, the juvenile arson program prototypes will be tested in selected jurisdictions.

## II: The Juvenile Arson Problem: A Review of the Literature

Juvenile firesetting and arson have long been the subject of research but until very recently, *t* ce has been a paucity of rigorous empirical research on the problem. This review (and, indeed, the entire report) should therefore be viewed with the understanding that the knowledge base and the conceptual models reflect a field that is in its relative infancy. Nonetheless, the material discussed in this section -- definition of terms, conceptual frameworks, characteristics of firesetters, etc. -- represents an important foundation for understanding the problem of juvenile firesetting.

### Juvenile Firesetting and Arson Behavior: A Definition of Terms

Juvenile firesetting and arson represent antisocial or delinquent behaviors. However, firestarting in and of itself need not be an abnormal behavior. In fact, certain types of fire behavior represent a naturally-occurring developmental sequence in the lives of the majority of children. The central issue is how to define normal or age-appropriate fire behavior and distinguish it from abnormal or deviant fire behavior. Specific categories describing normal and abnormal fire behavior provide a context for understanding how these different types of fire behavior develop in youth.

There are four separate categories of youthful fire behavior along a continuum representing increasing levels of involvement with fire. The four categories are fire interest, fireplay, firesetting, and arson. Individual characteristics, social circumstances, and environmental conditions influence youth to develop either age-appropriate or fire-safe behaviors or deviant or fire-risk behaviors. In a normal, age-appropriate sequence, children learn to handle their interest in and use of fire competently in a supervised setting. Certain negative environmental/social conditions and individual problems may lead juveniles into engaging in pathological firesetting and arson behaviors.

Fire interest. There is substantial evidence indicating that most children express a natural curiosity about fire (Kafry, Plock & Block, 1981; Jackson, Glass & Hope, 1987). Interest in fire can begin as early as age three and may continue until age six or seven. It is most typically observed in young boys, although some girls also are likely to express their interest. Children usually express their interest by asking questions about fire, incorporating fire related objects, such as fire engines, into their play, or asking permission to participate in supervised activities which involve fire, such as lighting a barbecue. Parents should not be reluctant to acknowledge their child's interest. Supervised experience in fire related activities teaches children how to engage in fire-safe behaviors and reduces their chance of engaging in pathological firesetting.

<u>Fireplay</u>. Nearly 50% of children who express an interest in fire actually participate in some sort of fireplay (Kafry et al., 1981). Fireplay occurs when children experiment with matches or other firestarting materials in an unsupervised setting. The majority are young boys between the ages of five and ten (Kafry et al., 1981; Gaynor & Hatcher, 1987). These

children are apt to be motivated by curiosity and experimentation, and most of their fires are accidental. Once they discover their fireplay has resulted in fire, they make serious attempts to either extinguish the fire themselves or go for help. While most of these fires are easily extinguished, environmental conditions (e.g., the place where the fire was started, the type of kindling, the weather, the time until the fire is discovered, etc.) also determine the destructiveness of a fire resulting from fireplay. Early recognition and detection of fireplay behavior coupled with appropriate remediation are likely to reduce the likelihood of youth becoming involved in future firestarting incidents.

<u>Firesetting</u>. Pathological firesetting is distinguished from fireplay in that fire setting is the result of an intentional firestart. The majority of young firesetters are males as young as seven and as old as eighteen (Gaynor & Hatcher, 1987). These youth actively seek out firestarting materials such as matches or lighters and, without adult supervision, ignite papers, leaves, trash, or properties belonging to themselves or others. Firesetting may be driven by a number of different reasons, including psychological pain and conflict, anger and revenge, the need for attention, malicious mischief, or excitement. The resulting fires may be small and easily extinguishable or large and require firefighting intervention. Unlike kids involved in non-malicious fireplay, firesetters often do not try to extinguish their fires nor do they attempt to go for help. After firesetting, they frequently leave the fire scene only to return later to either watch their fire burn or to see the resultant damage and destruction. Firesetting youth and their families require immediate attention to prevent the recurrence of firestarting behavior.

<u>Arson</u>. Arson is distinguished from firesetting by law or statute. Statutes developed primarily for defining adult arson behavior have been applied to juveniles when and where they are appropriate. Although there are both federal and state laws defining the crime of arson, individual state statutes determine the specifics of adult and juvenile arson and vary from state to state. Nevertheless, there is a general set of similar legal standards utilized by most states. These similar standards define the felony of arson as the <u>malicious</u> and <u>willful</u> burning of any structure, forest land, or property.

Juveniles starting fires which warrant firefighting intervention and which result in significant property damage, loss, or personal injury are at risk for being investigated by law enforcement for the crime of arson. If it is determined that the fire was the result of a malicious and willful intent to destroy and the youth has reached the age of accountability, then it is likely that the youth will be charged with arson.

In this report, we shall use "<u>firesetting</u>" as the more general, inclusive term, including fireplay and arson.

### The Magnitude of the Juvenile Arson Problem

In attempting to determine the rates of juvenile arson with some degree of accuracy, we are confronted with several sources of potential error and gaps in the data, whichever index or data base is used. The most comprehensive source of information is probably the Uniform Crime Reports of the FBI. Although the UCRs contain only <u>reported</u> crimes those reported to, and recorded by, local law enforcement agencies -- it is unlikely that arsons are underreported as much as other crimes: even small fires are likely to be detected by the authorities, whereas victims of minor burglary or assault will often not bother with reporting the event. Yet the determination of an arson, as opposed to an accidental or (especially) a suspicious fire, is no simple matter. And if a fire is classified as suspicious, it does not demand the attention and resources of law enforcement and prosecution as arson does. Consequently, it is believed that many arsons go unreported as such. A second difficulty stems from the fact that in order to know whether the arson was committed by a juvenile or adult, the perpetrator must be apprehended -- another relatively improbable event. Only about 15% of all arsons are cleared by arrest (UCR, 1987).

In searching for an alternative to the less than ideal UCRs, we are led to the National Fire Incident Reporting System (NFIRS), a data base developed by the U.S. Fire Administration. NFIRS information is based on data submitted by over 10,000 fire departments who routinely file individual reports for each fire occurring in their jurisdictions. Unfortunately, although the NFIRS contains much valuable information on arson rates, it does not classify arsons by age of offender; thus no juvenile arson rates are available from this national data base. However, at the state level (e.g., California) there have been some attempts to identify the age of the arsonist.

Consequently, the best current method for estimating the magnitude of the juvenile arson problem is through examination of a combination of data sources. In 1985, the National Fire Protection Agency estimated that nationwide there were 117,000 structural fires of an incendiary or suspicious origin, and 45,500 vehicle arsons, costing a total of 1.804 <u>billion</u> dollars. Using the UCRs as rough estimates of the proportion of arsons attributable to juveniles, NFPA estimated that approximately 35% to 40% of the arsons were set by juveniles. (The arrest rate for 1985 was actually 41%, but it is generally thought that arrest rates for juvenile arsonists are somewhat higher than their actual rate of arson, since they are less skilled and therefore more likely to be apprehended than adults.) Using the more conservative figure of 35%, it is estimated that juveniles committed approximately 57,000 arsons in 1985 at a cost of \$631 million.

The UCRs for 1986 show that 40% of all arson arrestees were juveniles -- virtually unchanged from the previous year (UCR, 1987). The UCRs also provide clues to the demographic composition of juvenile arsonists. Males comprised 89% of all juvenile arsonists arrested in 1986. Of the 6,271 juveniles arrested that year, 16% were under 10 years of age and 59% were under 15. Nearly 85% of juveniles arrested for arson are Caucasian; only 14.3% are Black.

Although more precise estimates of the juvenile arson problem are desired (and are being explored as part of this project), there is little doubt that the problem is significant in scope and impact, certainly deserving of attention.

The rate of juvenile fireplay and firesetting -- short of arson as determined by fire investigators -- may also be quite high. In a group of normal children, Kafry (1980) found that more than 80% reported an interest in fire and 45% had engaged in actual fireplay.

Overall, 21% admitted to lighting small, easily extinguished fires. In a clinical sample of children, Kolko & Kazdin (1988) found that 19-35% admitted to setting fires but only 8-9% were reported to fire authorities. These figures indicate that juvenile firesetting control strategies must include prevention and early intervention efforts to control fireplay as well as appropriate treatments for firesetting and arson.

### Conceptual Frameworks

There are several conceptual frameworks which provide foundations for examining the underlying causes and development of firesetting behaviors. They are descriptive, rather than predictive frameworks, and are reviewed for their potential as helpful structures from which to view the dynamics of firestarting. As the review indicates, there is a paucity of empirical evidence to confirm or repudiate the conceptual models. They are useful, however, for understanding juvenile firesetting and developing effective intervention strategies.

Many of these frameworks are rooted in social learning theory which emphasizes the role of the child's environment, particularly family and peers, on behavior. Social learning theorists believe that behaviors such as firesetting are learned and can be unlearned. The theory suggests that firesetting occurs because the youth learns the behavior; i.e., observes firesetting, tries it, then is rewarded in some fashion for the experience.

The dynamic-behavioral formulation offered by Fineman (1980) appears to be the most useful conceptual framework. It identifies a number of individual and social factors related to the development of firesetting behavior; presents a flexible, broad-based framework suitable to firesetters with diverse motives, situations, and problems; and can be used to develop firesetter profiles based on varying levels of problem severity.

The dynamic-behavioral formulation views firesetting behavior as an interaction between elements of the child's past experiences which may make the child more likely to engage in a variety of antisocial behaviors, factors in the child's surroundings which may have reinforced the firesetting behavior, and current incentives and environmental circumstances which encourage the firesetting (Fineman, 1980). The three major components in the child's life which are related to the development of firesetting are (1) personality and individual characteristics, (2) family and social circumstances, and (3) immediate environmental conditions. Individual characteristics consist of demographic, physical, emotional, motivational, and psychiatric factors. Social circumstances are comprised of family, peer, and social variables. Environmental conditions refer to events occurring immediately prior to firesetting.

Dynamic-behavioral theory presents a framework for understanding the causes and dynamics of juvenile firestarting behavior, and aids in defining levels of firesetting severity. Fineman (1980) posits two basic types of firesetting behavior, curiosity firesetting and pathological firesetting. Curiosity firesetters are young, normal children who set fires primarily for reasons of environmental exploration or experimentation. Pathological firesetters are older juveniles who are motivated by strong emotional distress such as anger or revenge, overriding stress such as divorce or other family disruption, and the reinforcing

negative attention firestarting will bring from parents, peers, and the community. In their study of 617 firesetters in Rochester, N.Y., Cole and his associates found that the large majority of firesetters were young (most were under 10 years of age) children without any significant pathology who were motivated primarily by curiosity (Cole, Grolnick, Laurenitis, McAndrews, Matkoski, and Schwartzman, 1986).

Profiles of the two major categories of firesetters (based on age) are found in Tables 1 and 2. Table 1 describes the profile of youth ages thirteen and under involved in firesetting and Table 2 describes the profile of adolescent firesetters. Each of these profiles is summarized in terms of the individual characteristics, social circumstances, and environmental conditions described by Fineman's dynamic-behavioral formulation. These profiles present a way to organize current knowledge regarding the major risk factors of firesetting behavior. A clear understanding of these characteristics and conditions is essential for the accurate identification of juvenile firesetters and for the development of effective strategies for ameliorating their behavior.

# Table 1Profile of Child FiresettersAges 13 and Under

Determinants	Description
I. Individual Characteristics	
A. Demographic	Predominantly young boys ranging in age from three to thirteen, but averaging 10 years old and coming from a mixed socioeconomic background.
B. Physical	A higher than average incidence of physical illness occurring in young boys between the ages of six and ten. Sexual or physical abuse may be present.
C. Cognitive	Normal intelligence levels, but higher than average incidences of learning disabilities, shortened attention spans, and poor academic achievement. Younger children often do not understand the dangers of firesetting.
D. Emotion	Feelings of anger and aggression coupled with an inability to appropriately express these emotions.
E. Motivation	Motivated primarily by curiosity, often accompanied by displaced anger or revenge.
F. Psychiatric	Majority do not have significant psychiatric problems. If present, the most frequent psychiatric diagnosis is Conduct Disorder.
II. Social Circumstances	
A. Family	Single-parent homes with an absent father are typical. If both parents are present, there is a higher than average degree of marital discord. The more disturbed children may have dysfunctional families with patterns of physical violence.
B. Peers	Many are socially isolated and detached. Some difficulty establishing and maintaining interpersonal relationships.

## Table 1 (Cont'd)Profile of Child FiresettersAges 13 and Under

Determinants	Description
C. School	Poor academic performance with a history of behavior and conduct problems is common.
III. Environmental Conditions	
A. Antecedent Stressors	Specific stressful events occurring which trigger

B. Accompanying Behavior

C. Consequences

Specific stressful events occurring which trigger emotional reactions.

The act of firestarting may represent emotional release of displaced anger and aggression.

Firesetting has both immediately positive reinforcing properties of attention and effect. Negative outcomes of property loss, injury, and punishment are often not salient to the firesetter.

## Table 2

## Profile of Adolescent Firesetters Ages 14-18

Determinants	Description
I. Individual Characteristics	
A. Demographic	The majority are young males coming from a mixed socioeconomic background.
B. Physical	There is a higher than average incidence of accidents resulting in physical injuries. Also, there is evidence indicating the possible occurrence of physical abuse.
C. Cognitive	Normal intelligence levels; however, histories of learning disabilities, poor academic achievement, and one or more failures to advance with class in school.
D. Emotion	Firestarting often represents a display of anger, revenge, and aggression. These feelings are experienced with great intensity and inappropriately expressed in socially unacceptable ways. Also, there is difficulty experiencing remorse or guilt, especially after firesetting.
E. Motivation	For some adolescents, firestarting gains them attention and recognition from family, friends, and the community.
F. Psychiatry	Conduct disorder is the most typical diagnosis. Many also display a pattern of delinquent behavior which is likely to lead to additional criminal activity or an adult diagnosis of antisocial personality if no intervention takes place.
II. Social Circumstances	
A. Family	Single-parent homes where an absent adult male is most common. If both parents are present there is a high degree of marital discord, uneven discipline and supervision, and one or more parents carrying a psychiatric diagnosis. Physical abuse and other violent patterns of family interaction also are observed.

## Table 2 (Cont'd)

## Profile of Adolescent Firesetters Ages 14-18

Determinants	Description
B. Peers	Firestarting is influenced by the need for attention, acceptance, and recognition from the peer group.
C. School	Consistent patterns of poor academic achievement, failure to advance in school grades, and conduct and behavior problems with frequent school suspensions of expulsions.
III. Environmental Conditions	
A. Antecedent Stressors	The peer group supports and encourages firesetting which often is the result of emotional or impulsive behavior resulting from the occurrence of a stressful event or circumstance.
B. Accompanying Behaviors	Other antisocial and delinquent behaviors such as alcohol consumption, petty theft, and vandalism typically occur at the same time or just prior to firestarting in the company of at least one or two friends.
C. Consequences	The immediately reinforcing properties of firesetting include the resulting attention from family, friends, and the fire department. There is relatively little fear of punishment nor consideration of the negative outcomes of property loss or physical injury.

## III. Juvenile Firesetter Programs Nationwide: An Overview of Major Program Characteristics

Our assessment of juvenile firesetter programs was driven by two broad questions: (1) what is the nature of juvenile firesetter programs -- their general purpose, structure, operations, and effectiveness; and (2) what components and approaches of the more promising approaches can serve as bases for the development of prototype approaches? To capture the general state-of-the-art mainstream juvenile firesetter programs, it was necessary to conduct a national search followed by a two-stage mail survey of 70 programs. To identify and document promising program strategies and components, two-day site visits were made to thirteen programs across the nation. These site visits also enabled us to examine more closely the specific strengths and difficulties of developing and operating a juvenile firesetter program.

Administration and staffing. The overwhelming majority (87%) of the programs surveyed are located within and administered by the fire service -- either by the Office of the Fire Chief, Fire Investigation, or Fire Marshal. Only a handful of programs (5) are found outside of the fire service. Not surprisingly, the majority of the programs (76%) reported that their programs are staffed primarily by fire service personnel, most of whom have received some training in juvenile arson assessment and/or treatment. Program staff include firefighters, fire investigators, deputy fire marshals, and fire safety educators. The size of the staff depends on the resources of the department and the extent of the juvenile firesetting problem, and may range from one person to several. Programs may also use trained counselors (14%) and community volunteers (10%).

<u>Population served</u>. Most of the programs focus their attention on the younger, less troubled firesetter. Ninety-four percent of the programs target youths from 7-14 years old. Fifty-eight programs (83%) will see children as young as 3 years old, but only 59% will see older, 14-18 year old youths. Older youths are handled primarily through the justice system, often bypassing the juvenile firesetter program. Most the programs surveyed serve fewer than 100 juveniles per year.

<u>Program strategies</u>. The juvenile firesetter programs tend to follow one of two broad intervention approaches; one developed by the U. S. Fire Administration (USFA) and the other by the National Firehawk Foundation. Previous studies have reported that these programs are very similar with respect to administration, primary focus, and the youths they serve (Kolko, 1988). As Kolko points out, the primary difference between the two approaches is the Firehawk Foundation's strategy of pairing the juvenile firesetter with a firefighter. The firefighters serve as role models for youths, primarily boys, who need attention and guidance. Seven programs reported using this "big brother" or buddy approach. Both the USFA and Firehawk models emphasize assessment and education.

<u>Assessment</u>. Assessing the nature and seriousness of the youth's firesetting is a central function of nearly all the juvenile firesetter programs. Informal assessments consist of discussions with the youth and/or the parents about the incident and the child's environment. Formal assessments, which are conducted by most of the programs, most often follow format developed by the U. S. Fire Administration. This format includes a standardized interviews with the juvenile and his/her parents and cover the child's

background, firesetting incidents, home environment, and the extent to which the child exhibits certain behaviors indicative of adjustment problems. Answers to the interview questions are scored and the child is placed in one of three categories -- "little concern," "definite concern," or "extreme concern." Youths categorized as "little concern" or "curiosity" firesetters are usually given some form of fire safety education. Troubled youth classified as "definite risk" or "extreme risk" are usually referred outside the program for counseling.

Education. Fire safety education is the most frequently reported intervention -- 74% of the programs surveyed reported offering some form of fire safety education. The education, often geared toward younger firesetters, includes topics such as elements of fire, fire as a tool, what to do in case of a fire, how to plan fire escape routes, and how to conduct a home fire safety inspection. Programs may choose to hold one or more education sessions using a variety of materials including films, games, coloring books, and brochures. In some programs parents attend the education sessions along with their child.

Education is used for primary prevention as well as intervention -- many juvenile firesetter programs provide fire safety education in the elementary schools. These primary prevention efforts usually target lower elementary school grades, and may be provided by teachers or firefighters. The topics covered in school fire safety curricula are similar to those taught to firesetters. Topics include the elements of fire, fire escape planning, "stop, drop, and roll," and the concept of fire as a tool.

<u>Counseling</u>. A small number of juvenile firesetter programs, most notably those in Dallas and Houston, go beyond fire safety education to provide more in-depth counseling. These programs attempt to teach firesetters to use alternative behaviors to express their anger, frustration, or sadness. Others try to correct the underlying family problems associated with the firesetting. Counselors often view serious juvenile firesetting as a family problem, not an individual problem.

<u>Restitution</u>. Juvenile firesetter programs may also require more serious firesetters to provide some form of restitution. In some cases the restitution is directly related to the youth's firesetting incident. For example, youths may be asked to repair property damaged in the fire. Program personnel believe that these activities will have a more significant impact on the youth than monetary restitution or general community service.

<u>Referral</u>. The overwhelming majority of the more troubled firesetters are referred to one of a number of agencies. Juvenile firesetter programs may refer youth to mental health, social service, probation, and juvenile justice agencies. The key to obtaining the necessary services for juvenile firesetters is establishing good referral procedures with each of these agencies.

The characteristics listed above are broad categories of program features and services. Although similar in the nature of the services they provide, the juvenile firesetter programs offer unique and diverse combinations of assessment, education, and referral services.

## IV. Central Issues and Promising Strategies: Toward Prototype Development

## Central Issues

In our documentation and assessment of juvenile firesetter programs across the nation, several significant issues have emerged, issues which need to be squarely addressed as we move into prototype development. For although the juvenile firesetter programs show considerable uniformity in their general approach, they also exhibit a great deal of variation with respect to how they deal with specific issues of importance, such as program effectiveness, which firesetters are seen, the type of services provided and the program's relationship to the justice system.

<u>Program effectiveness.</u> There is little doubt that existing programs of juvenile firesetting prevention and control contain numerous effective elements and strategies that can be drawn upon to develop prototype programs and materials. Although many programs appear to have received their general direction -- and some specific methods -- from national sources (especially USFA workshops and materials), most of these programs are essentially "home grown," developed in trial-and-error fashion by one or two people committed to solving the problem of juvenile firesetting in their communities. In some instances, the results have been very impressive, in other cases, less so. And although no major demonstration/evaluation effort has ever been conducted in this area, a variety of strategies have in fact proven themselves in the crucible of the real world. To a considerable extent, the "fittest" of approaches have survived and been retained by programs while ineffective procedures have fallen by the wayside.

Beyond these Darwinian dynamics, there also exist several types of data from the sites that serve as indicators of program effectiveness. Most programs report recidivism rates, and they are invariably quite low, rarely exceeding 7%. These rates are subject to question, because so few programs maintain accurate follow-up statistics. In some contrast to these rather positive indicators, there are also data that show that many of the programs do not capture the large majority of juvenile firesetters, mainly because of insufficient outreach activities or poorly formed referral agreements. The overall indications, however, are that the programs are generally effective in halting the firesetting behavior of the youths who are seen by the program. Moreover, an overall positive assessment of these programs seems quite plausible in light of the findings from our literature review and on the basis of our own perceptions that for the large majority of these youths, firesetting is not a deeply rooted behavior borne of some intractable pathology, but rather a problem behavior that can be corrected by a combination of counseling and education. (In this respect juvenile firesetting stands in considerable contrast to other problem behaviors such as drug use and general delinquency, where the fostering conditions and reinforcement properties are formidable obstacles to remediation.)

<u>Types of Juvenile Firesetters Referred to the Program.</u> In some of the programs most of the firesetters are referred by the parents, in others they are referred mainly by arson investigators, and still others, by the schools or the justice system. The dominant referral source appears to be primarily a function of the way the program has conducted

its outreach efforts and with whom relationships have been established -- activities that often appear to have been directed more by whim and proximity than by careful planning and outreach. Only a few programs deliberately embarked on carefully orchestrated efforts to involve all the relevant agencies and officials in comprehensive planning sessions to both win their support from the outset and carve out specific roles and responsibilities. Consequently, most programs receive referrals from those officials or agencies with whom they already have a relationship (e.g., the arson investigators) and perhaps one or two other agencies, but the full range of potential referral sources are not explored, and when they are, explicit agreements about specific roles are not forged. Unfortunately, at most sites such agreements seem particularly vague or lacking across agencies of the justice system.

Types of Prevention/Intervention Services. As discussed above, many of the Juvenile Firesetter Programs offer prevention education to the elementary schools, with coverage varying from a few classes per year for some programs to hundreds of classes and presentations annually. These classes present general fire safety education, along with (in some programs) cautions against setting fires. These kinds of prevention education activities have their roots in the understanding that the majority of juvenile firesetting, both in terms of number of fires and damage done, is done by pre-adolescent youth, most of whom are not involved in serious crime or delinquency. Interestingly, however, many programs conduct very little school-based prevention education, and several programs -otherwise quite good -- conduct none at all. There seems no reason why virtually all programs should not be conducting prevention education in the schools, particularly if, as is the case in some programs, a cadre of volunteers from the fire department or the community can be trained to perform this function. Of course, actual insertion of fire safety education into an elementary school curriculum is not a easy matter, but even if a curriculum addition is not possible, a series of presentations to the children (e.g., in assemblies) can usually be arranged.

The types of interventions offered in any particular program depend, of course, on the kinds of juvenile firesetters referred to the program. Since the younger, "curious" firesetter without any serious pathology or delinquency record is the most frequently seen client in most programs, the most common intervention offered is a series of educational sessions. However, the term "education" is used in the broad sense; sometimes the content of these sessions includes the roots and reasons of juvenile firesetting -- its emotional dynamics -- couched in language children can understand. The amount of this material included in the sessions also varies considerably across programs, and appears to be related to the extent to which the program handles the more troubled youth.

The parents are sometimes involved in the intervention along with the child, depending on the results of the initial interviews. To the extent that the firesetting is thought to have pathological elements that are rooted in family dynamics, the family is often referred to longer term counseling or therapy by qualified professional therapists in the community.

Indeed, virtually all of the programs refer the emotionally troubled youth to outside counseling rather than attempting it themselves. Given the background and limited training of the typical program staff, this kind of arrangement seems necessary. Relationship to the Justice System. Although most of the programs have some relationship to agencies of the criminal justice system, the type of relationship and the kind of agency vary greatly across programs. Seldom are there the formal agreements and working relationships throughout the justice system that are needed to ensure adequate coverage and tracking of all juvenile firesetters. Some programs will have good relationships with the police but not the juvenile courts, others with the courts but not the prosecutors, and so on. If the program is to have solid working relationships with all relevant criminal justice agencies, it must (a) establish specific agreements with the agencies about roles and responsibilities, and (b) ensure that the central elements of the agreement are communicated throughout the agency.

There seems to be a clear division of roles and functions between the juvenile firesetter program and the justice system. It seems appropriate that the program concentrate its resources on the juvenile firesetters who are not otherwise involved in crime or delinquency, while the justice system directs its attention toward the serious juvenile arsonist who acts with criminal intent (either in the firesetting or other delinquent acts). However, as mentioned above, there seems no reason why nearly <u>all</u> juvenile firesetters should not come to the attention of the juvenile firesetter program. At the very least, they should provide a tracking system for all juvenile firesetters. And with the possible exception of repeat offenders, all juvenile firesetters should probably be sent to the juvenile firesetter program for evaluation. By the same token, referrals from the justice system should (as in most programs) either carry the threat of prosecution (in less severe cases) or be part of the sentence or a condition of probation.

Thus, although each has its distinct role to play in handling the juvenile firesetter, there is considerable overlap in these roles of the program and agencies of the justice system; close coordination and cooperation are essential.

### Components of Prototype Programs

The central elements of prototype juvenile firesetter programs have emerged rather clearly from our national assessment. These elements will form the basis for the prototypical approaches and related policies and procedures manuals to be developed in Stage II:

- (1) Program Structure -- location, staff, and training.
- (2) Planning and Coordination -- establishing relationships between the program and other agencies.
- (3) Publicity and Outreach -- raising public awareness about the problem and the program.
- (4) Screening and Evaluation -- procedures for assessing juvenile firesetters.
- (5) Intervention Services -- services for preventing and intervening in juvenile firesetting.

- (6) Referral Mechanisms -- maintaining referral systems between the program and other agencies.
- (7) Monitoring Systems -- Building and maintaining systems for tracking the disposition of cases, recidivism rates, and rates of juvenile firesetting.

All these elements can be found in the assessed programs, although even the best of programs have not fully developed more than a few of the components. During Stage II, materials and procedures will be developed so that virtually any jurisdiction can develop and implement a state-of-the-art juvenile firesetter program. The following descriptions are intended as foundations for the prototype policies and procedures that will be developed in detail during Stage II.

<u>Program Structure.</u> The juvenile firesetter program should be located in the fire department. Only as a last resort should the program be placed outside the fire department. At least one person in the fire service with genuine interest in the juvenile firesetter issue should be assigned primary responsibility for the program. He or she should be a well-respected professional, preferably with some measure of seniority and status. In larger departments additional staff should also be part of the program, with particular functions assigned to each (e.g., assessment, outreach, etc.). It is desirable, but not necessary, that at least one staff person have a counseling/human services background.

Regardless of the staff background, all program staff should be given training in juvenile firesetting and related issues (e.g., child development, juvenile delinquency, etc.).

In addition to staff training, some training and orientation should be given to all fire service personnel, especially arson investigators and upper level command staff. It is important to obtain early and full support of the command staff. Carefully prepared briefings for the Chief and Deputy Chiefs should help to gain that support.

<u>Planning and Coordination.</u> Because of the importance of interagency relationships and referral networks, the establishment of a coordinating body or council is essential. The coordinating council should be composed of all those officials in the jurisdiction whose responsibilities relate to juvenile firesetters. At the very least, these should include officials from the schools, mental health agencies, social services, and all arms of the justice system. The officials recruited for the council should have status and influence within their agency, along with the interest and time to do something about the problem.

Included in the prototype materials should probably be some materials, perhaps a video (if costs permit), designed to inform and "recruit" these officials. A workshop should also be presented to the coordinating council, following the Rochester model.

The chief functions of the council will be to disseminate information about the program, define the roles of each agency, develop specific referral agreements with the program, and maintain the network of relationships among members.

<u>Publicity and Outreach.</u> The program should develop a public information and education campaign to raise the public awareness about the juvenile firesetter problem and the program. The breadth of the campaign will depend to some degree on the amount of resources available to the program. At the least, the campaign should include some print materials for distribution (e.g., a pamphlet), as well as a series of interviews and/or presentations in the media and to the schools and key community organizations. Ideally, a series of PSAs would also be developed for airing on radio and television.

As time and resources permit, these public information materials will be developed as part of the prototypes (or detailed guidelines for their development.)

<u>Screening and Evaluation.</u> Assessing the depth and nature of the juvenile firesetters problem is one of the key functions of any Juvenile Firesetter Program. All programs should employ the standardized interview protocols developed by the USFA (or similar forms), rather than relying on informal discussions. In most instances these interviews should be conducted with the parents as well as the child. In Stage II, ISA will further examine the USFA interview forms with the intention of improving them. In addition, the Therapeutic Assessment of Firesetting Questionnaire (TAF) will be further explored for possible use by programs.

The program should be responsible for assessing virtually all the firesetters, including older delinquents, although youths with serious emotional problems should be referred to mental health professionals for further evaluation.

<u>Intervention Services.</u> All programs should conduct prevention education in the schools, and some form of "counseling education" for juvenile firesetters.

The prevention education should be modeled after the Rochester program, where basic fire safety and related topics are presented to all children K-6. A guide for a prevention education program will be included in the prototype approaches, along with sample instructional materials for reproduction and use in the education programs. These materials will draw on existing educational programs developed by NFPC and others. A related set of guidelines will be developed (possibly integrated into the school curriculum guide) for broader community education, featuring the techniques developed in Seattle (such as the "talking fire-hydrant robot" and films), and in Eugene (e.g., the anti-arson comic books). Much of the prevention education in the schools can be conducted by trained volunteers, either from the fire service or the community.

The education sessions directed at firesetters should be a blend of information on general fire safety and "counseling" education -- teaching children to understand the role that their emotions and peer and family relationships play in firesetting. (The prototypes will contain guidelines for these sessions as well.) To the extent that the family is involved in the juvenile's problem, they too should receive the education sessions. Many older serious delinquents should also be given the education sessions, usually along with other interventions (probation, etc.): The processing of a juvenile delinquent with a record should not, by itself, preclude their receiving assistance from a juvenile firesetter program. Indeed, often a referral to a program should be a part of the delinquent's sentence (e.g., condition of probation).

More programs should also include some direct, if limited, counseling of troubled firesetters, as the Dallas and Ft. Worth programs do. The graphing technique developed by Dr. Bumpass from Dallas appears to be an excellent vehicle for counseling young firesetters about the connections between emotional dynamics and firesetting. However, no counseling should be attempted unless the staff has appropriate training, both general and specific, in counseling youth.

For the most part, therefore, counseling and therapy (certainly of the extended type) should be conducted outside of the program.

Restitution is another intervention that the program may impose on the more serious firesetters. The particular form of the restitution should be tailored to the fire incident (as in the Largo program), and should typically be coordinated with the relevant juvenile justice authorities.

Programs should also consider the pairing of a firesetter with a firefighter (the Firehawk approach) as an intervention, particularly for those youths who lack good male role models.

<u>Referral Mechanisms.</u> Juvenile firesetter programs operate in the midst of several agencies in the community, and their effectiveness is highly dependent on the efficient functioning of referral mechanisms. These mechanisms are largely responsible for bringing the firesetting youths to the doorstep of the programs, and for insuring that the youth receives the assistance, that he or she needs. As mentioned above, the coordinating council should establish these specific agreements at the outset, and both the council and the program staff should work to maintain solid referral mechanisms.

The prototype materials will describe the procedures for establishing and maintaining the referral mechanisms.

<u>Monitoring Systems.</u> The juvenile firesetter program should be responsible for tracking the characteristics and disposition of all juvenile firesetters. A computerized system would enable the program (and other agencies) to track all cases, calculate recidivism rates, etc., at any time. ISA plans to develop a prototype data system in Stage II.

## Stage II-IV: Continued Development of Programs and Procedures

This report represents the culmination of the Assessment Stage (Stage I). The knowledge gained in the course of the assessment will be the raw material for the conduct of Stage II -- development of prototype approaches for the prevention and control of juvenile arson and firesetting. The prototype designs will contain a detailed description of model programs, and will include guidelines for implementing the model and its components.

In Stage III the prototype designs will be used to construct a training and technical assistance package to help local jurisdictions implement advanced juvenile firesetter programs. The TA/training package will be tested in selected jurisdictions in Stage IV.

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