

**JUVENILE FIRESETTER MENTAL HEALTH INTERVENTION:  
A Comprehensive Discussion of Treatment, Service Delivery,  
and  
Training of Providers**

**Office of Juvenile Justice & Delinquency Prevention**

**National Association of State Fire Marshals**

**Juvenile Firesetter Intervention Project**

**Paul Schwartzman, Study Team Chief Expert**

**1341 Fairport Road**

**Fairport, New York 14450**

**(716) 377-2720**

**(716) 377-3433 (FAX)**

**[paulsman@ix.netcom.com](mailto:paulsman@ix.netcom.com) (email)**

Kenneth Fineman, Ph.D.

Michael Slavkin, A.B.D.

Patricia Mieszala, R.N.

Jeffrey Thomas, Psy.D.

Carol Gross, M.A.

Barbara Spurlin

Michael Baer, Ph.D.

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## SECTION A-----GENERAL INTRODUCTION AND OVERVIEW

The primary goal of this report is to better understand the roadblocks to mental health treatment for juvenile firesetters and to make recommendations to alleviate these impediments. Over the past twenty years, there has been a concerted effort in the United States to address the problem of children and fire. It has been well established that child fire play and fire setting behavior is a serious problem accounting for many thousands of fires, hundreds of deaths, thousands of injuries, and millions of dollars in direct property loss every single year. In response, the federal government, along with several other organizations, have conducted research and facilitated program development among the fire service to respond to this problem. Much has been learned about the psychological presentation of children and the circumstances that lead to their fire use. Considerable practical experience has been acquired to better understand how to establish and conduct intervention programs to identify, assess, and educate children, especially when their fire use is primarily motivated by curiosity. A significant percentage of children are involved in fire setting due to emotional difficulties and serious family problems. These children require more intensive interventions by mental health professionals. However, finding appropriate mental health services continues to be a challenge, even in communities where there are established programs within the fire service.

It would be a great disservice to the efforts of the past twenty years to simply revisit the traditional psychological and sociological perspectives of why children start fires and what their environmental influences are. As mentioned above, this is well understood. The purpose of this report is to expand on the traditional psychological perspective of focusing on the intrapsychic workings of youth and shift to the awareness and understanding of the psychological providers

themselves. This report will examine the awareness and training needs of mental health professionals and recommend treatment protocols for use with specific types of firesetters.

In addition, this report will approach the sociological dynamics from the perspective of understanding and enhancing the inter-relationships between service providers. More specifically, the report will examine interagency culture and economics and recommend actions to broaden the availability of effective mental health intervention.

Finally, the report will summarize the most current literature addressing traditional psychological and sociological perspectives on juvenile firesetting to insure that all future directions are built on a solid foundation.

## SECTION B---INFORMATION DISSEMINATION AND TRAINING NEEDS OF MENTAL HEALTH PROFESSIONALS

### Overview

As a result of limited interaction between practitioners and fire professionals, mental health practitioners have limited awareness and knowledge of juvenile firesetter issues. During an initial investigation of university and college programs in psychology, counseling, social work, sociology, and law enforcement, approximately 5% of those sampled indicated that there was ever any discussion of juvenile firesetting during coursework. As a result, many student professionals who will treat children and juvenile firesetters have never had any training regarding the etiology or developmental nature of firesetting behaviors.

Due to the limited nature of programs that examine juvenile firesetting, limited numbers of professionals in mental health and law enforcement exist who can treat juvenile firesetters. Further, even when they are interested in learning more about juvenile firesetting, they have a difficult time identifying necessary treatment modalities.

A recent survey conducted by this study team polled 300 randomly selected psychotherapists. The survey measured knowledge of juvenile firesetter issues, experience with juvenile firesetter clients, training received, interest in training, and where psychotherapists typically go for information on treatment issues (NASFM, 1999). The results demonstrated:

- a poor awareness of juvenile firesetting behavior
- a low interest in the issue, reflective of poor awareness of the magnitude of the problem, dismal knowledge of treatment modalities, existing information and

- references in their libraries may be outdated,
- lack of knowledge of the current literature and available resources (NASFM Task Force on Psychological and Sociological Issues, 1999).

Very few professionals surveyed had received any formal, recognized training in either evaluation or treatment of juvenile firesetting behavior. Many indicated that they were amenable to attending training opportunities, if available. However, few indicated any knowledge of such opportunities in their area.

Juvenile firesetting is a poorly comprehended aspect of the mental health system. It is estimated that up to 20 percent of juveniles placed in residential treatment facilities have a history of firesetting behavior that is not being recognized by the facilities and practitioners. As a result of this limited awareness, few professionals in the field recognize the impact that juvenile firesetting has on the families they treat or the communities they serve. If a problem is not perceived or recognized, it is very difficult to attract any interest in additional training.

Therefore, it is imperative that a multi-faceted approach be developed to raise awareness and establish a need for training. It is equally important that the methods used to deliver this training utilize state of the art training technologies to encourage interest and maximize exposure.

#### Recommendations for Disseminating Information and Training

The following are recommendations for disseminating information and training to mental health professionals. If any significant reduction is to occur in the level of juvenile-set fires, there must be a greater appreciation for the problem at hand and the need for intervention. As such, the following recommendations are designed to improve awareness of the problem, and increase training and tasks designed to serve as interventions.

- Establish a formal linkage with the American Psychotherapy Association (APA) to establish a committee to continue to look at training issues over a two-year period.

Dr. Michael Baer, a member of this study team, is president of this organization and has already expressed an interest in facilitating this process.

- Explore critical partnerships with other national organizations that could partner with the above-established entities to further explore support and training.

Such partnerships could include but not be limited to Public Health Organizations, National Institute of Mental Health (NIMH), Department of Justice/Office of Juvenile Justice and Delinquency Prevention (DOJ/OJJDP), National Association of Social Workers (NACSW), American Counseling Association (ACA), American Psychological Association (APA), American Psychiatric Association (APA), American Academy of Pediatrics, Emergency Medical Services for Children (EMSC), National Association of School Psychologists (NASP), National Association of School Nurses (NASN), National Safe Kids, etc. Funding needs to be allocated for travel and advocacy to meet with heads of major organizations and attend annual meetings and conferences to facilitate contacts and networking on an on-going basis.

- Design a web-supported course for mental health professionals.

The course needs to be designed to allow for some interaction for clinical training, supervision and feedback. We do not want to lose the human interaction. A well-marketed "train the trainer program" that would be targeted and supported by a clinical team (this study team) and NASFM could accomplish this over time. Training could have

support materials distributed on CD-ROM which include forms, assessment models, sample interviews, fire data and education materials, etc. This could be an on-going series as new information and methods are developed.

Michael Slavkin, a member of this study team, has had extensive training and facilitation of web-based coursework during his career at Indiana University School of Education.

The Department of Counseling Psychology at Indiana University might be a strong field site for a one-semester training course on the etiology and treatment of juvenile firesetting.

- Affiliate the above training program with a graduate department(s) in a regarded university as a co-producer and sponsor.

This will also facilitate sensitizing graduate students to juvenile firesetter issues as they begin their clinical training.

- It is recommended that an aggressive awareness campaign regarding issues and service difficulties be targeted at newspapers, and magazines (e.g., Newsweek, Time, etc.).

As mentioned above, a critical problem is lack of awareness. The survey suggests that mental health professionals are not looking at professional journals to learn about juvenile firesetters because they do not believe it is relevant or important to them. Perhaps subsequent grant moneys could be used to support our team working with a national public relations firm to assist in an aggressive effort to place articles and news stories in popular publications where they will receive maximum exposure. Articles would be timed so there are several articles coming out over a period of time with the assumption

that repetition and more visibility would generate interest and commitment. The study team would need to maintain control over content especially of mass media stories.

Pat Mieszala, RN, Director, Burn Concerns (CA) a member of this Study Team made an appearance on NBC “Dateline” in February. This feature focused on creating awareness for parents about juvenile firesetting especially as it pertains to curiosity and supervision.

This could be an ideal kick off to this campaign. Stories and articles have appeared but never with quality control and repetition. We need to create demand. We could generate more emphasis on lower level incidents, which actually occur more regularly, and model early interventions that are more likely to be successful.

- Write a series of informational articles based on treatment methods and interface with fire service for professional journals and publications.

Articles would be based on examples from Sections C & D that highlight different profile types and community linkages that would model and highlight the interface. The Study Team would work with editors of identified journals to negotiate best articles or perhaps a series, or monograph.

## SECTION C---TREATING THE JUVENILE FIRESETTER AND RECOMMENDED MENTAL HEALTH TREATMENT STRATEGIES

### Overview

Children's involvement in fire is a multidimensional behavior motivated by a variety of circumstances. Because of the complexity of this behavior, mental health treatments need to be sensitive to these various motivations, in order to be maximally effective. This section will outline recommended treatments and attempt to prioritize methods to be utilized with particular presentations.

Paul Schwartzman, Chief Expert of this team, is the co-author of a chapter entitled "Fire Setting" (Cole, Grolnick, Schwartzman, 1999), outlining evaluated treatment protocols for juvenile firesetters. A review of subsequent literature and feedback from therapists with experience treating juvenile firesetters indicated that the protocols presented in this text remain state of the art. These methods will be summarized in this section. Therapists who have experience treating juvenile firesetters also recommended the utility of linking specific treatment protocols with particular types of firesetters. Dr. Kenneth Fineman, a member of this team, authored a paper entitled "A Model for the Qualitative Analysis of Fire Deviant Behavior" (Fineman, 1995). In this article Dr. Fineman offers recommended terms to describe different firesetter types, as well as a dynamic-behavioral model to classify them. The integration of this model, typologies and treatment protocols is believed to provide an effective mental health treatment intervention.

### The Dynamic-Behavioral Model

The dynamic-behavioral theory is a broad-based conceptual framework designed specifically to explain firesetting behavior. The dynamic-behavioral formulation views firesetting as an interaction between dynamic historical factors that predispose the firesetter toward a variety of maladaptive and antisocial acts, historical environmental factors that have taught and reinforced firesetting as acceptable, and immediate environmental contingencies that encourage the firesetting behavior.

The major contribution of the dynamic-behavioral theory is that the majority of research related to describing the psychosocial characteristics of firesetting youngsters can be organized and classified utilizing this conceptual framework. Regardless of how the specific variables in dynamic-behavioral theory are defined, their common underlying feature is that they can be observed and measured to confirm or reject their hypothesized relationship to firesetting. The model tries to define variables such as personality, social, and environmental factors, that will predict the occurrence of firesetting behavior.

The dynamic-behavioral theory defines the observable variables comprising each of three classes of psychological determinants:

1. Personality and individual characteristics
2. Family and social circumstances
3. Immediate environmental conditions

Individual characteristics consist of demographic, physical, emotional, motivational and psychiatric variables. Social circumstances are composed of family, peer and social variables.

Environmental conditions refer to events occurring immediately prior, during and after

firesetting. These variables interact to produce firesetting, or increase the risk of firesetting.

### Types of Firesetters

There are many "types" of firesetters listed in the literature concerning firesetting behavior. Researchers have categorized firesetters by focusing on a variety of personality and other factors, which specify a quality of their personality or of their previously set fires. Any attempt to categorize the firesetter should serve the pragmatic purpose of helping describe that firesetter's risk level for future fire-related dangerous behavior. Dangerousness in terms of firesetting includes behavior that destroys property or does physical and/or emotional harm. It also concerns itself with the probability that the juvenile will set more fires. Thus, the specification of firesetter "type" should alert one to the characteristics of the firesetting sequence which are most salient, and thus predict fire-related dangerousness: the intent to do or likelihood of doing harm to persons or other living things, extreme property damage, or continued firesetting.

Most previously defined "types" in the literature can be subsumed under one of the following types. It is important to understand that these categories are not exclusive. In fact, a firesetter may have multiple motives for his behavior. The following firesetter types focus on the firesetter's psychological state or diagnostic category, what is set on fire, or whether the fire is set as a function of the setter's self-focus (the need to bring attention to himself) or other-focus (the need to use fire to direct public attention elsewhere).

### Non-Pathological Juvenile Firesetters

Several types of non-pathological juvenile firesetters have been identified. Specific to this discussion is the curiosity or accidental type of juvenile firesetter.

#### Curiosity (or Accidental) Type

The most common profile describes children who act primarily out of curiosity and do not developmentally understand the consequences of their behavior. The few studies that have examined representative samples of children converge on this point. The majority of children who start fires do so out of experimentation and may not have other psychological problems. Children motivated exclusively by curiosity tend to be young, primarily between 5 and 10 years of age, and to be involved in only one reported fire incident.

While this curiosity-driven fire play is apparently not pathological, it is nevertheless potentially dangerous and a concern. There are familial and environmental factors that predict whether children engage in fire play and serve as guides to preventive intervention. Access to ignition materials, momentary lapses in supervision, the perception that they would not be disciplined if they were caught playing with fire, and premature exposure to and responsibility for activities involving fire are all associated with curiosity fire play. Teenagers trying to conduct science experiments frequently fall into this group.

### Pathological Juvenile Firesetters

Several types of pathological juvenile firesetters have been identified. Specific to this discussion are the cry for help type, the delinquent type, the severely disturbed type, the cognitively impaired type, the sociocultural type, and the wildland firesetter type.

#### The Cry for Help Type

The cry for help type includes children of all ages. These juveniles consciously or subconsciously wish to bring attention to an intolerable life stress. This may be an intrapersonal dysfunction such as depression or attention deficit/hyperactivity disorder. It could also be associated with an interpersonal dysfunction such as family stress and dysfunction, stressful life events, separation and divorce, and remarriage. This type of firesetting is more likely to continue without intervention. Physical and sexual abuse and chronic neglect are frequently associated with recidivism. This type has a good prognosis for treatment. Included in the cry for help type is the juvenile would-be hero type.

#### Delinquent Type

The delinquent type usually involves adolescents between the ages of 11 and 15. Typically their firesetting is part of a larger constellation of conduct and aggression problems. An interest in vandalism and hate crimes is noteworthy. As juveniles manifesting this type, though frequently showing little empathy for others and little conscience, they usually avoid harming others with fire. Significant property damage is common. In this group, firesetting behavior is more easily extinguished than other personality and behavioral problems, which usually accompany the firesetting.

### Severely Disturbed Type

The severely disturbed type (includes the sensory reinforcement controlled type and the self-harm type). This disturbed group includes the paranoid and psychotic for whom the fixation on fire may be a major factor in the development of their mental disorder. Sensory reinforcement controlled describes those for whom the sensory aspects of the fire are sufficiently reinforcing to cause fires to be frequently set. The reinforcement histories of many suggest an early fixation on fire. The willingness to harm is difficult to predict in this group. Clinical experience shows that even with the psychotic there is a tendency to avoid harming others. However, the degree of reinforcement control with the pyromaniac (DSM-IV clinical diagnosis), a sub-type of the sensory reinforcement controlled (usually obtaining sexual or sensual reinforcement) is often powerful enough to allow significant harm to occur. (The experience of the clinicians on this team indicates that those who set fires for sexual or sensual reinforcement include less than 2 percent of juveniles and adults who set fires.) The self-harm type uses fire to harm or kill himself. Prognosis is guarded with this group, the degree to which fire is a significant part of a delusion or the offender's intrapsychic life being a deciding factor.

### The Cognitively Impaired Type

The cognitively impaired type (including the developmentally disabled and the organically impaired types). This group, though tending to avoid intentional harm, lacks good judgment. Significant property damage is common. Prognostically they are good therapy candidates. The organic group includes those persons whose cognitions or ability to control impulses are significantly affected by their neurological or medical state. Also included in this

group are persons with severe learning disabilities and those who were affected by fetal alcohol syndrome or by the drugs taken by their mother during pregnancy.

### Sociocultural Type

The sociocultural type (including the uncontrolled mass hysteria type, the attention to cause type, the religious type and the satanic type). This category includes those arsonists that set fires primarily for the support they get for doing so by groups within their communities, such as the southern woodburners. The southern woodburners are a community-supported group who go to classes and are taught to set fires. Usually, they set federal lands on fire and avoid local lands. They allegedly want to eliminate varmints in the brush. Also included are those who set fires in the midst of civil unrest and are either enraged and enticed by the activity of others and follow suit, or set fires with deliberation in order to call attention to the righteousness of their cause. Most community-supported firesetters avoid harming others, but cause significant property loss. Those involved in uncontrolled mass violence frequently lose control and harm others, though initially the intent to do so may not be present. Those setting fires to focus on a cause may avoid harming others depending on the history of violence associated with their cause. Most are amenable to treatment.

### Wildland Firesetter Type

The wildland firesetter type (may include elements of 5 and 6 above). Includes those who set fires in forests, brush and other open areas. These offenders set fires with the intent that the fire spread to inhabited areas or simply don't care if this happens. Injuries to humans or animals

are not often considered. They cause significant property loss. They see themselves as perpetual victims of society and wish to pay society back. They are at risk for continued firesetting, but are treatable if caught. This type must be carefully evaluated as this type of firesetting is fairly common in some parts of the country, and in others suggests a high level of dangerousness.

The manner in which variables in the dynamic-behavioral model interact defines the profile type to which the firesetter belongs. Understanding how the variables interact also allows one to more easily predict fire-related dangerousness and to choose the most effective manner of intervention. Choosing the most effective manner of intervention refers not only to selecting a particular technique, but selecting the most relevant, vulnerable and outcome dependent point in the firesetting sequence to modify.

### Assessment and Treatment

Firesetting behavior is typically not a presentation that most mental health professionals assess or treat. If a mental health professional is treating a firesetter they may not be aware of the behavior because the information was not offered or asked for. If the therapist is aware of the firesetting behavior, it is not focused on but assumed to be just another behavior in a constellation of many and therefore not specifically treated. Historically, the mental health profession has not received systematic training concerning firesetting.

Firesetting needs to be specifically addressed clinically. Pathological firesetting is likely to continue if the underlying motivations or reinforcers are not specifically identified and treated. This is the fundamental difference in treating juveniles with firesetting behavior in contrast to others. Beyond this initial intervention, the tools that most mental professionals possess are well

suited to this population. The intent of this section is to highlight the critical assessment methods for juvenile firesetters and their associated treatments.

### Assessment Strategies & Issues

Because firesetting is associated with such a broad array of child and family problems, it is strongly suggested that a comprehensive, structured interview initially be conducted with the juvenile. As mentioned above, firesetter types can range from curiosity, which does not require mental health intervention to more profoundly learning disabled or emotionally impaired individuals. A structured interview will enhance the likelihood that if a diagnosis is present, it will be discovered.

Given the strong relationship between firesetting and family dysfunction, it is also recommended that a comprehensive family assessment be conducted. A home visit is helpful. It allows the direct observation of the adequacy of the environment, parent-child interactions, and the safety of the home in terms of availability of ignition materials. If the mental health professional is not in a position to conduct a home visit, fire service or other relevant agency reports should be provided to inform this assessment.

As in the individual assessment, a structured interview with parents to assess family stresses, discipline practices, parent observations of child behavior, and other measures of family circumstances will better inform the process of determining risk and necessary interventions.

As outlined in the dynamic-behavioral model, the particulars of the fire incident are critically important to determining the type of firesetter and prioritizing interventions. Careful attention to the antecedents of the fire, the fire itself and the child and parent response to the fire

are essential. Details describing the location of the fire, what was burned, who was there, the ignition source and how was it obtained will all help to determine the primary motivation and future risk.

The following typical scenario describes the cognitions, behaviors and feeling states of a pathological firesetter in the sequence in which they most frequently occur.

1. The firesetter, based on his early experiences and reinforcement history, is predisposed toward the maladaptive use of fire.
2. The firesetter, predisposed to a variety of maladaptive behaviors, undergoes a crisis that lowers stress tolerance and increases impulsivity.
3. The firesetter feels victimized by the perpetrator of the crisis, if not by society at large.
4. This crisis may create a specific motive (i.e., the need to obtain relief from anger or jealousy or the completion of revenge).
5. The firesetter considers setting a fire.
6. The firesetter previews successful images of firesetting, thus reducing anxiety/guilt, which might be called forth the first time a fire is attempted.
7. The firesetter makes a decision to start a fire.
8. The firesetter makes a conscious decision to destroy property.
9. The firesetter gathers tools for ignition.
10. The firesetter justifies his behavior before starting the fire. Accompanying his cognitive distortions and excuses is an affective state (frequently anger) which makes the justifications more acceptable. Delusions of invulnerability may occur at this time.

11. The firesetter starts a fire.
12. The firesetter continues to self-justify, even after the fire has started. New emotional states may occur, i.e., the feeling of elation and heightened sensitivity, replacing anger. At this time pleasure may be generated by the fire's destructiveness or the perception of power over others. The firesetter continues to dwell upon his invulnerability.
13. The firesetter continues to justify the fire, even after it is over. Affective states accompanying cognitions may vary from euphoria to a calm, placid state. At this time the firesetter continues his perceptions of invulnerability, telling himself that he will not get caught now, and that he will not get caught in the future even if he repeats the act.
14. The firesetter shows little remorse and continues feeling superoptimistic about future fire-related escapades.

Forms have been devised to guide this task. Fineman has developed structured forms specifically for mental health professionals (See Table 2) and fire service professionals based on the dynamic-behavioral model (Fineman, 1997, 1988, 1988a, 1988b, 1981, 1979). Other practitioners such as Kolko (Kolko, 1994) have also devised assessment forms to assist in the structured assessment of the child, family, and fire event(s).

### Treatment Issues

Mental health professionals are accustomed to working independently. It is imperative

that a relationship be maintained with the fire department and police department when working with juvenile firesetters. Both organizations are important sources of information regarding the child, family, and fire incident. These members of the community also have knowledge of additional fire involvement or other risk behaviors not offered in the therapeutic setting.

The fire service also can provide assistance in the intervention process by providing well-targeted firesafety education. The mental health professional must prepare special waivers to allow the type of contact necessary to provide comprehensive treatment. Regardless of the seriousness of the fire incident or motivation, fire safety education must be part of any intervention. If the referral to mental health originated with the fire service, an educational intervention may have already been conducted. If the fire department has not been involved, the mental health professional should invite a trained fire safety educator familiar with juvenile firesetter issues to conduct this in tandem with the therapist.

Educational intervention should be appropriate to the juvenile's developmental level. Fire safety materials should address the nature of fire, how rapidly fire spreads, and its potential for destructiveness. Even when juveniles intend to start a fire, they do not necessarily understand the impact of their behavior (see Section G - Firesetting across Childhood and Adolescence). Appropriate responses to fire emergencies also should be included, such as knowing two ways out of a room when there is a fire. Parents need to be included in this process with emphasis on safe storage of ignition materials, supervision of children, and the importance of not allowing use of fire before juveniles are truly capable of understanding the responsibility.

Mental health interventions are of maximum effectiveness if a flexible, team approach is provided. Due to the chaotic nature of households housing a juvenile firesetter, a traditional

medical model of therapy will not be sufficient. An outreach model is helpful to connect families with essential services and to encourage follow through. Case management also is an important element to assist with interagency involvement and coordination.

Practitioners indicate that they do not see many firesetters from economically challenged backgrounds, as a result of the limited nature of funding for mental health. In order for juvenile firesetters from both socioeconomically limited and wealthy families to receive services, it is recommended that State Fire Marshals sponsor the development of the Fire Intervention Mentor Model (FIMM). This model will allow for the training of key mental health personnel in various municipalities. These mental health personnel will be responsible for training other mental health personnel in more outlying districts. Further, these “mentors” will be willing to supervise mental health personnel, who are not trained with regard to firesetter treatment, at no or reduced cost. Thus, those families that “fall between the cracks” because of funding issues will be able to receive treatment from any number of mental health personnel, who will then be personally supervised by phone, or email by “mentors.”

Treatment for firesetting can follow the traditional mental health hierarchy, starting with outpatient care and progressing to inpatient care. Placement will depend on the level of risk for continued fire setting, and the family’s ability to provide support and structure.

Another unique aspect of therapeutic interventions for juvenile firesetters is the importance of establishing the link between firesetting behavior and the juvenile’s feelings that lead to firesetting. As described in the dynamic-behavioral model, firesetting is an interaction of personality, social, and environmental factors. It is critical that the juvenile understand this interaction in order to begin to recognize the circumstances and emotions that lead to firesetting

in order to intervene and redirect these emotions, thoughts and behaviors to healthier choices.

Bumpass and colleagues (1983) have developed a charting process, in which the juvenile can concretely visualize the events causing particular feelings leading up to fire setting. The juveniles are taught to recognize these triggering emotions early in the sequence so that they can interrupt it and chose more productive responses to difficult emotions. This is essentially a graph with the events and feelings, in chronological order, written along the X-axis, with the magnitude of the emotion indicated along the Y-axis.

In an interview, the juvenile is asked to describe all the events that occurred on the day of a particular fire. These are listed sequentially with the fire incident in the center. The events are reviewed and the juvenile is asked to describe their thoughts and feelings for each of the events. A corresponding line is drawn on the graph indicating the duration and intensity of the feelings involved in the events. The therapist can assist by prompting for fuller descriptions and helping to label emotions. Once the juvenile and parents understand and can identify this sequence, positive responses and behaviors to cope with these feelings are generated and listed. The juvenile is instructed that the next time these initial feelings are experienced to employ the alternative behavior instead of firesetting.

In a study of 29 patients (ranging from five to fourteen years of age) treated with this method, Bumpass and associates (1983) report that only two participants set subsequent fires. Follow-up periods were from 6 months to 8 years with an average of 2 1/2 years (see Table 1). The method was demonstrated to be an intervention that can alter dangerous firesetting behavior quickly and early in the intervention process.

Beyond the above priorities and techniques, mental health interventions with juvenile

firesetters follow existing recognized approaches to psychotherapy. However, specific techniques should be prioritized with specific types of firesetters.

Earlier in this section, the cry for help type of firesetter was illustrated in which the juvenile is responding to serious family stress and dysfunction. In families where juveniles turn to firesetting, there is usually a serious deficit in communication and problem-solving skills. Emphasis on teaching communication can help these juveniles develop more effective ways to express their feelings and frustrations. Aggression replacement training or anger management skills train juveniles to express anger in less violent and more socially acceptable ways. Social skill building will be used to replace non-socially accepted behaviors with those that do not violate social or legal standards.

Juveniles who resort to firesetting to bring attention to difficult situations often do so because they feel helpless and powerless. Very often, they simply cannot think of anything else to do. These juveniles and their families demonstrate poor problem solving and decision making skills. In such cases, family problem-solving techniques, which have been used and evaluated in a variety of settings and with a variety of clinical populations, may be effective. Also, assertiveness training may be an important treatment component, giving the firesetter “a voice” in his family or in his peer group.

For example, one program uses a seven-step problem-solving technique (Ritchey & Janekowski, 1989). The steps are (1) define the problem, (2) brainstorm possible solutions or alternatives, (3) evaluate the solutions or alternatives, (4) select a solution, (5) plan the implementation, (6) try it, and (7) evaluate the effectiveness of the plan. Families are taught to follow each step and are provided practice in working out problems together.

Figure 1.

Techniques to Intervene with Juvenile Firesetters by System

Category I – Techniques to Control or Suppress Firesetting	
Bumpass Graphing Technique Token Systems Behavior Management Role-play & rehearsal Covert Sensitization	Gardiner Storytelling Technique Cognitive Techniques Relaxation Techniques Hospitalization & Residential Care
Category II – Individual Treatment	
Empathy Training Behavior Management Assertiveness Training Social Skills Training Depression Therapy Medication	Sex Abuse Treatment Substance Abuse Treatment Role-play and rehearsal Special Education
Category III – Family Issues Treatment	
Domestic Violence Treatment Parenting Skills Training Behavior Management Substance Abuse Treatment	Marital Therapy Problem-solving
Category IV – Community Issues	
Restitution	

Community Service Community Impact Statement Accountability
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The ability to develop a successful treatment for those juveniles who set fires out of pathological motivation requires an understanding of those factors which contribute to firesetting and an understanding that factors within the firesetting sequence will be weighted differently depending on the specific motive, state, or issues involved. The following list is a guideline. It reflects the usual thought, emotional and behavior components to firesetting in a sequential fashion. From an analysis of the behavioral, emotional and cognitive factors one can determine the category or type to which a firesetter belongs and, further, develop a treatment plan. In completing the firesetting sequence analysis one can assign weight to the various factors listed by determining if the factor is of little, definite or extreme concern, thus suggesting that the factor is of little, definite or extreme risk with regard to future firesetting (see Table 2). The pattern of risk weighting that evolves will identify the type, as listed above in the body of this paper, and the category (I-IV) as listed directly above.

Figure 2.

FIRESETTING SEQUENCE ANALYSIS FORM FOR MENTAL HEALTH PROFESSIONALS

	Little Risk	Moderate Risk	Extreme Risk
<b>General History</b>			
Personality			
Psychopathology			
Psychopathological			
Function of fire			
Health			
Family			
Peers			
School			
Behaviors			
<b>Fire History</b>			
Early supervision			
Fire Safety			
Early fascination			
Previous fires			
Parent response			
<b>Crisis or Trauma</b>			
<b>Characteristics of Firestart</b>			
Ignition source			
How obtained			
Place started			
Time of fire			
Property targeted			
Material ignited			
Vacant or occupied			
Set alone			
Deliberate or not			
Intent to harm/destroy			
<b>Distortions</b>			
Before fire			
During fire			
After fire			
<b>Feelings</b>			
Before fire			
During fire			
After fire			
<b>ETOH or Drug Use</b>			
<b>Reaction to Act</b>			
<b>Reinforcement</b>			
Fire set/observed			
Internal			
Sensory			
Cognitive			
External			
Concrete			
Cognitive			

### Interventions

The following interventions are suggested for each of the firesetter types listed below. The order of intervention is important, and the mental health professional will likely progress more efficiently in treatment by adhering to the suggested sequence.

### Non-pathological Juvenile Firesetters

1. Curiosity type/Accidental type:
  - Fire Safety Education (in firehouse)
  - Diversion Program
  - Evaluation for ADD
  - Parent Training

### Pathological Juvenile Firesetters

1. The Cry for Help Type:
  - Psychotherapy-traditional, supportive and cognitive behavioral
  - Bypass Technique
  - Storytelling
  - Role-play and rehearsal
  - Depression therapy focus
  - Medication Consult
  - Marital and Family Therapy frequently needed

The Cry for Help Type, cont.

- Assertiveness Training
- Social Skills Training, Abuse and/or Substance Treatment as needed

2. The Delinquent Type:

- Behavior Management
- Token System with younger children
- Empathy Training
- Restitution
- Community Service
- Cognitive Behavioral Treatment
- Anger Treatment
- Assertiveness Training
- Social Skills Training
- Abuse/Substance Treatment as needed
- Depression Evaluation/Treatment
- ADD Evaluation/Treatment
- Relaxation Techniques

3. The Severely Disturbed Type (Paranoid and/or psychotic):

- Hospitalization/Residential Care
- Medication

The Severely Disturbed Type (Paranoid and/or psychotic), cont.

- Intensive Behavioral Outpatient Therapy
- Empathy Training

The Severely Disturbed Type (Paranoid and/or psychotic), cont.

- Social Skills Training
- Role-Play and Storytelling

4. The Severely Disturbed Type (Sensory Reinforcement Controlled/Pyromania):

- Intensive Cognitive Behavioral Outpatient Therapy
- Covert Sensitization
- Medication Consultation
- Behavior Modification
- Sex Therapy as needed
- Empathy Training
- Social Skills Training
- Relaxation Techniques

5. The Severely Disturbed Type (Self-Harm Type):

- Hospitalization/Residential Care
- Depression Treatment
- Medication

The Severely Disturbed Type (Self-Harm Type), cont.

- Intensive Behavioral Outpatient Therapy
- Assertiveness Training
- Role-Play
- Storytelling

6. The Cognitively Impaired Type:

- Special Education
- Intensive Fire Education
- Bypass Technique
- Storytelling
- Token Systems
- Behavior Management
- Role-Play and Rehearsal
- Assertiveness Training
- Empathy Training
- Relaxation Techniques
- Restitution

7. The Sociocultural Type:

- Psychotherapy-traditional, supportive and cognitive behavioral
- Relaxation
- Role-play
- Storytelling
- Empathy Training
- Restitution
- Community Service
- Depression therapy focus
- Medication Consult
- Marital and Family Treatment frequently needed
- Abuse and/or Substance Treatment as needed
- Assertiveness Training
- Social Skills Training
- Cognitive Behavioral Treatment
- Anger Treatment
- Relaxation Techniques

8. The Wildland Firesetter Type:

- Behavior Management
- Token System with younger children

- Empathy Training
- Restitution
- Community Service
- Cognitive Behavioral Treatment
- Anger Treatment
- Assertiveness Training
- Social Skills Training
- Abuse/Substance Treatment as needed
- Relaxation Techniques
- Psychotherapy-traditional, supportive and cognitive behavioral
- Bumpass Technique
- Storytelling
- Relaxation
- Role-play and rehearsal
- Depression therapy focus
- Medication Consult
- Marital and Family Treatment frequently needed

## SECTION D---INTERFACE BETWEEN FIRE SERVICE & MENTAL HEALTH

### Overview

In order to provide adequate intervention to the juvenile firesetter, it has become clear that fire service and mental health must work together. Frequently, firesetting is motivated by reasons that cannot be addressed simply with an educational intervention. Although the fire service continues to do an outstanding job with public education, few departments have within their ranks trained mental health professionals who can provide counseling and/or psychological assessment. This necessitates the fire service having access to mental health providers who are adequately trained and prepared to deliver service around the issue of firesetting.

Many people in the fire service are acutely aware of this need. Unfortunately, few mental health providers are aware of the problem of juvenile firesetting, and fewer still are prepared to provide service. Consequently, it may be up to those in the fire service to reach out to mental health providers in their community.

Most fire service professionals are already accustomed to interfacing with other agencies. Fire departments traditionally already have an interface with other agencies, such as law enforcement, EMS, and with each other through mutual aid agreements. These interactions exist because they are mutually beneficial to each agency and to the public. The same mutual benefit exists between the fire service and mental health. The fire service can provide mental health professionals with a basic understanding of juvenile firesetters. The fire service also can become a steady source of referrals to mental health professionals. This is especially of interest to the independent practitioner. The fire service may provide the mental health professional with

opportunities for continuing education. Lastly, the interactions can afford the mental health professional with opportunities to expand into the role of consultant, trainer, and/or supervisor. The motivations for the fire service are no less apparent. First and foremost it provides the fire service a place to refer youths and families that have a genuine need for counseling. This serves to increase the effectiveness of educational interventions provided by the fire department and also allows for good customer service. The fire department also can look to the mental health professional to provide consultation in other areas such as investigations, fire prevention and education, and critical incident debriefing.

In order for mental health and the fire service to successfully work together, it is important to recognize that there are a number of challenges that they must overcome. Both professions have their own language and culture. While this makes communication with colleagues easy, it does hinder communication across disciplines. Each profession must make the effort to learn and understand the culture of the other. Creating opportunities for both professions to interact with each other in person can easily facilitate this. The fire service can easily invite mental health professional to visit a fire station or training academy, and mental health professionals can take opportunities to educate those in the fire service about issues related to the diagnosis and treatment of mental disorders. Since both professions are rich in terminology and jargon, it may require individuals to ask questions about areas and terms that are not familiar to them. As each profession learns the other's language it will also allow for greater understanding of each other's role in intervening with the juvenile firesetter.

The confusion of roles is perhaps one of the biggest pitfalls of an interface between mental health and the fire service. Roles must be clearly defined and agreed to by both parties. The fire service

is probably in the best position to administer a juvenile firesetter program. The fire department is also best suited for assessing the firesetter to determine when a family needs referral for counseling. A number of good assessment instruments may be easily obtained, and are available for use by anyone in the fire service.

It is not the role of the fire service to provide counseling. Only professionals who are licensed/certified to do so by their home state's regulating body, should perform counseling.

When fire service personnel interact with juvenile firesetters, they may create a liability risk and exposure to lawsuit for themselves, their department, and their community. Once it has been determined that referral is necessary, it is the responsibility of the fire service to make referral to providers who have been previously identified as having competence in the area of juvenile firesetting.

The identification of trained mental health providers may be another challenge to overcome in the provision of good customer service to the juvenile firesetter. Fire departments should seek out mental health professionals who already have the skills needed to provide service to children, adolescents, and families. It should be noted that not all mental health professionals are trained in child, adolescent, and/or family therapy. Also, many providers who treat children may not have the skills or feel comfortable treating adolescents. The same may be true for the adolescent therapist, who is asked to treat young children. Therefore, it may become necessary to identify different providers to fulfill specific needs or niches.

Another important consideration is that most mental health professionals rarely have training in juvenile firesetting behavior. It will probably be necessary for the fire service to provide some type of initial training for their mental health providers. A number of qualified personal within

the mental health community and the fire service are available to provide this type of training. This training can be approved for continuing education credit. The ability to receive continuing education credit may facilitate greater involvement from mental health professionals. Lastly, any mental health provider treating juvenile firesetters should have the requisite education, be licensed/certified, and have current malpractice insurance. It would not be considered unusual for the fire service or other housing agency to request updated copies of these certificates on annual basis. In addition to understanding firesetting behavior as it relates to the individual, mental health providers need to understand the role and utility of fire in our society. It also is important to be aware of cultural and regional differences with regard to appropriate use of fire.

Moreover, it is incumbent upon the mental health provider to comprehend the educational intervention that is conducted by the fire service. Mental health providers should have a working knowledge of fire and life safety. Furthermore, mental health providers ought to have an understanding of fire investigations and any criminal charges that may be related to firesetting behavior. As part of their intervention with juvenile firesetters, mental health professionals may be asked or required to interact with the juvenile justice system in their community.

In some communities it may not be possible to identify qualified mental health professionals or mental health professionals who are willing to be trained in juvenile firesetting. In this case it may be necessary to identify a group of alternative providers. This group might include school counselors and/or nurses, social services, child protective agencies, hospitals, psychiatric or burn nurses, and/or clergy. Any time an alternative provider is utilized, the fire service should use the same level of scrutiny to determine that these providers meet the educational and licensing requirements for their discipline, that counseling is within the scope of their practice, and that

they have professional liability insurance that covers counseling. Any alternative provider also must undergo the basic firesetter training provided by the fire service.

Once a referral is made, it is important for the mental health provider to communicate and provide some sort of feedback to the fire service. This may be difficult because of the confidentiality laws that regulate mental health providers. This problem can be resolved easily by having the parents sign a release of information at their point of first contact. This can be done by either the mental health professional or the fire service. Once signed, this document allows for an easy flow of information between those involved in treating the juvenile and his/her family. This flow of information is essential to providing the “wrap-around” service that is often needed in these cases. The fire department may also request a discharge summary at the time that treatment has been completed.

Once a partnership with the fire service and mental health exists, it is incumbent on both professions to nurture that relationship. Some type of regular forum that allows for dialogue, problem solving, case consultation, and continuing education should be created. This will continue to allow both professions the opportunity to learn from each other and to acquire a deeper understanding about each other’s culture and language. This forum also may allow for the opportunity to draw other agencies and members of the community into the partnership. Clearly, there is a need for mental health and the fire service to work in partnership when intervening with juvenile firesetters and their families. Although a number of obstacles exist that may make this partnership difficult, they are not insurmountable. Moreover, the benefit to both professions, to the customers and to the communities far outweighs any difficulty that may be encountered.

### General Recommendations

The following recommendations are submitted to facilitate the establishment of new partnerships and to further partnerships that are already in existence:

- Fire Service and Fire Departments provide assessment and education.
- Fire Service use one of the recognized assessment tools that are available.
- Mental Health Professionals provide counseling.
- Fire Service locates and provides initial training to Mental Health Professionals.
- Fire Service becomes an approved provider of continuing education units for Mental Health Professionals or partner with an agency that is already approved.
- Create a specialization for Mental Health Professionals in the area of Juvenile Firesetting that is administered by NASFM or other national organization.
- Mental Health Professionals create opportunities to cross train Fire Service Professionals in mental health issues as they relate to juvenile firesetting.

SECTION E-----FUNDING MENTAL HEALTH TREATMENT

Firesetting is not just a fire department issue. It is a family as well as a community issue. When a fire is set in a community, everyone is impacted. The family, the fire department and the community feel the dynamics of the incident.

Behavioral health services for firesetters and their families are a needed component of all firesetter programs. When children are exposed to crisis situations: family arguments, loss of a loved one, move to a new home or school, or experience an illness, they may react by starting fires. The juvenile often uses such behaviors as a form of communication. However, most fire departments do not have trained, licensed behavioral health personnel to respond to these needs of the child and their family.

The mental health aspect of a firesetter program has been proven to be valuable over and over. The fire department's ability to fund the firesetter program, which includes the mental health component, shows a commitment by the department to the problem of youth set fires. Funding mental health treatment for firesetters and their families is necessary and valuable to the community. Historically these programs are funded through insurance, Medicaid, and state and local funding sources.

When a department approaches an organization for funding it must realize that it has a grantworthy cause, that the project is necessary and valuable to the community and that the fire department itself has budgeted some of its own monies for this purpose.

## Funding

Many sources exist that a fire department can approach for funding the mental health component of its firesetter program. Different organizations may fund for different reasons. Some will fund for political and social/moral values. Others will fund for the public relations and marketing values they will gain. Still other foundations or individuals may support this endeavor because of personal experiences in the area of fire setting or fire loss. Approaching other organizations like the Juvenile Courts and Child Protective Services for assistance with funding is also a great possibility since these organizations have a vested interest in the firesetting issue. These agencies interface with many children who set fires.

Available funds, rather than the needs of the child and caregivers, often determine the length of mental health intervention. Private insurers often will limit payment to a portion of treatment (for example-50%). Caregivers using this option will often cease treatment before the recommended time because of the financial burden. For these reasons fire departments need to be able to fund counseling services for firesetters and their families so that the counseling can be obtained by the families on the basis of need and not ability to pay.

Other strategies that might be used in order to identify community members that can assist juvenile firesetters are:

- Counseling resources are available in every community that may be obtained free of charge.
- Counselors in elementary schools are already familiar with child issues, and may serve as effective interventionists between families and fire professionals

- Clergy have received training in counseling as part of their schooling, and may serve as effective interventionists between families and fire professionals
- Existing public mental health systems can be utilized
- University systems which train counselors, psychologists, or sociologists can be accessed to assist with helping juvenile firesetters
- Mental health professionals who do pro-bono work in their communities can be used
- Some mental health professionals utilize a sliding fee scale can be used
- Universities who are seeking placements for interns and residents may be placed in fire departments or in mental health organizations for the specific purpose of working with juvenile firesetters

If a fire department is able to obtain these local resources at no cost, to provide the counseling for the firesetter and his family, this is to everyone's advantage. However, oftentimes these free resources are already overloaded and unable to meet the demands of the firesetter program.

### Partnering

One way to effectively reduce firesetting in a community is by working together as a community. Bringing many different organizations together to solve a single problem is most effective. A synergy is created around the problem. Many different types of agencies may be approached as potential partners in the effort to fund the mental health component.

- Insurance company involvement in a firesetter program is a natural. Most adult

arsonists have a history of untreated juvenile firesetting. While insurers of all types certainly have a vested interest in the outcome of effective treatment programs for juvenile firesetters, very few have demonstrated a commitment to juvenile firesetter issues.

- Schools in recent years have directed a significant amount of funds to programs dealing with violence. Some firesets at school may be a result of curiosity. Others may represent a serious risk, yet many of these fires go unreported. There is a significant link between firesetters identified as at risk for repeating this behavior and other violent juvenile crimes. Therefore, schools become a great potential partner in many ways.

### Solutions

The following are suggestions for potential solutions for mental health dilemmas communities may be dealing with. Several potential solutions may be tried simultaneously in order to effectively counter the limitations that face communities attempting to help juvenile firesetters.

- Creative funding for treatment of firesetting children and caregivers must be a priority for any professional involved with juvenile firesetter intervention. The cost for not providing the much-needed services will be far greater in the long run.
- Involvement by insurers with funding programs, losses (both life and property) can be reduced or mitigated in the future by a proactive involvement in funding of treatment

programs and providing other resource for juvenile firesetter intervention programs.

- Promote active involvement in firesetting issues by schools by providing training on firesetter issues. A wonderful example of this occurred in Phoenix Fire Department's Youth Firesetter Intervention Program. The department obtained a \$10,000 Block Watch Grant in order to implement firesetting and prevention workshops for the Washington Elementary District principals, assistant principals, counselors, psychologists and teachers. The results of these workshops were that more students were referred into the firesetter program earlier. The counseling and educational interventions were made available to more families in this district than ever before. Fire and Life Safety awareness rose amongst the educators within the district. This turned out to be a win win situation for everyone involved.

In order to obtain optimal results a juvenile firesetter intervention program must be marketed effectively in the community. A high visibility will increase the accessibility and participation in the program and funding for the treatment of at-risk firesetters.

- Children's protective service agencies have, by law, an obligation to protect children from abuse and neglect. A significant portion of high-risk firesetters are victims of abuse and neglect. This agency can provide support and wrap-around services to address the issues of juvenile firesetting. Additionally, the ability exists to provide an effective link between all agencies with the justice system.

A particularly unique aspect of this has been demonstrated in the state of Oregon. The Department of Child and Family Services, which oversees the foster care system, linked with the fire service to fund the installation of residential sprinkler systems in

selected foster homes. With the sprinkler systems in place, foster parents were more comfortable placing juveniles with a history of firesetting. The plumber's union in the region also provided funding and technical support.

- Within the juvenile court system diversion programs exist for many types of juvenile criminal activity such as drugs, sex abuse and violence. These effective programs should be identified and used to establish juvenile firesetter diversion programs.

### Summary

Children identified as being at risk for repeating their firesetting behavior are often referred to mental health professionals as a result of their involvement in juvenile firesetter intervention programs, juvenile and criminal justice agencies, schools, child protective and family advocacy agencies. The services provided to children range from short-term counseling, day-treatment programs, in-patient hospital to residential treatment programs. Partnering with many different types of agencies, Fire Department budgeted monies, as well as creative funding for all components of a firesetter program, especially the mental health component, provides direct and indirect benefits to the customers in all of our communities. Raised awareness results in fewer fires and less lives lost. The energies committed in these areas are most definitely well spent.

### Recommendations

Fire professionals should design a national treatment-funding model that could be utilized by states in developing and maintaining inter-agency partnerships. Moreover, those interested in

these issues should assess insurance companies' awareness of future property loss reduction benefits by involvement in early juvenile firesetter intervention programs and develop programs that will have a significant impact on reducing property loss from arson fires in the future for insurers. Also, professionals should develop a model school program to treat juvenile firesetters identified through the school system. Finally, juvenile court programs should support and create treatment programs for juvenile offenders dealing with drugs, sex abuse and violence.

## SECTION F----GENERAL INTRODUCTION TO THE LITERATURE

### Purpose and Rationale

Jackie and Jordan, five- and four-year-olds growing up in a downtown neighborhood, were left alone to play in their bedroom on a Friday evening after dinner. Thirty minutes later, the smell of smoke and the screaming of children filled the house. Jackie and Jordan's parents, downstairs at the time of the fire, were only able to save their youngest children as they escaped their burning home. Within 10 minutes, everything they owned was destroyed and Jackie and Jordan were dead, the result of playing with a lighter the children took from their father.

### Scope of the Problem

Each year, fires set by juveniles account for a large percentage of public property damage and deaths. Fires set by children and adolescents are more likely than any other household disaster to result in death (National Fire Protection Association, 1999). In 1998, it is estimated that fires set by children and juveniles resulted in 6,215 American deaths, another 30,800 injuries, and \$11 billion dollars in property damage (National Fire Protection Association, 1999). Given the costs and impact of juvenile firesetting, it remains a little studied area of research.

### Purpose of the Review

The purpose of this review is to investigate psychological and sociological factors that contribute to the presence or continuation of firesetting in juveniles. The present review also examines any issues that have been identified with regard to (1) limited opportunities for effective mental health services for juvenile firesetters, (2) limited communication between professionals that work with juvenile firesetters, and (3) limited opportunities for effective intervention for juvenile firesetters as a result of managed care issues.

In order to effectively discuss developmental and sociological issues, this review will provide information on how (1) the typology of the firesetter can be reviewed as a function of individual characteristics (e.g. – social skills deficits, antisocial behavior issues) and environmental circumstances (e.g. – family pathology, school influence, peer influence, presence of crisis or trauma), as well as (2) how firesetting follows a developmental pattern across childhood and adolescence.

### Conceptual Framework of Review

Juvenile firesetting remains an understudied area. The last significant review by Kolko (1985) concluded that the individual's personality characteristics, in addition to the juvenile firesetter's environment, related to firesetting and recidivism. In the years since the Kolko (1985) review, limited additional research has occurred (see also Barnett & Spitzer, 1994).

Firesetting can be classified as one of many examples of problem behavior that has been identified in juveniles. In proposing his problem-behavior theory (Jessor, 1987; Jessor & Jessor, 1984), Richard Jessor asserts that most juvenile problem behaviors can be explained by an

examination of the particular characteristics and experiences of the juvenile (individual characteristics) within the contexts defined by a larger society or culture (environmental characteristics). In order for social scientists to understand a problem behavior, individual factors and environmental factors must be examined, in addition to the attributes of the situation in which the problem behavior takes place (Jessor, 1987).

Jessor and Jessor (1973, 1977) also assert that problem-behavior theory emphasizes the dynamic and systemic interaction between individuals and their environments. To explain a problem behavior as complex as firesetting, both individual and environmental predictors must be examined simultaneously (Magnusson & Endler, 1977).

Individual characteristics are defined as social and cognitive experiences that occur throughout development, and often reflect social meanings, values, expectations, beliefs, and orientations toward self and others (Jessor, 1987). Environmental characteristics are defined as supports, controls, models and expectations of others that are thought to be meaningful phenomena to the juvenile (Jessor, 1987). Exploration of these factors and their relations to the maladaptive behavior patterns of these children and adolescents has implications for better recognizing the developmental patterns that lead to juvenile firesetting.

The present paper's emphasis on psychological and sociological factors that contribute to the initiation or continuation of juvenile firesetting has implications for the ways in which education and counseling professionals work with these youth. It is hoped that this review will assist with the community's understanding of this problem, as well as improve the programming designed to intervene on behalf of these youth.

## GENERAL REVIEW OF THE LITERATURE

### Juvenile Firesetting

The juvenile firesetter is typically defined as a child or adolescent that engages in fireplay. However, such a definition implies a singularity about firesetting behaviors in children and adolescents. It is believed that individual and environmental predictors need to be examined simultaneously in order to adequately explain juvenile firesetting (Barnett & Spitzer, 1994). When examining motivating forces behind juvenile firesetting, many reviews have relied on a psychoanalytic orientation (Kaufman, Heims, & Reiser, 1961; Lester, 1975; Rothstein, 1963; Yarnell, 1940). However, this position largely has been rejected and has been replaced by a theory that examines the interaction between the individual and their environment.

In her seminal work on juvenile firesetters, Yarnell (1940) examined 60 cases of juvenile firesetting behavior from those admitted to the psychiatric division of Bellevue Hospital in New York. Yarnell speculated that youth who set fires do so in order to gain power over adults. She also emphasized the neglectful nature of the relationships between mothers and their sons. Yarnell examined the juveniles' relationships with fathers as they relate to professional issues, such as for children whose fathers are fire professionals.

### Individual Characteristics

Factors within the firesetter are used to predict and explain the maladaptive patterns of firesetting behaviors (Showers & Pickrell, 1987). Individual characteristics that are believed to relate to juvenile firesetting include individual instigations toward firesetting and constraints against firesetting.

Individual instigations refer to those factors within the individual that precipitate problem behaviors. Internal instigations examined in this review are the presence of aggression, sensation seeking, social skills deficits, an affinity for deviance and vandalism, covert antisocial behaviors and attention seeking within the firesetter.

### Aggression

Aggression in youth is not typically seen as a developmental difficulty until it is evidenced in tandem with behaviors of noncompliance and disruption. Childhood noncompliance and aggression have been identified as indicators of lifelong difficulty with aggression if interventions are not initiated (Carey, 1997; DeSalvatore & Hornstein, 1991). Firesetting behaviors have been closely related to antisocial behaviors in youth (Fineman, 1995; Raines & Foy, 1994; Repo & Virkkunen, 1997). Patterson (1982) asserts that firesetting may occur at the end of antisocial symptomology that progresses from high-rate, overt symptoms, such as disobedience; to low-rate covert symptoms, such as lying, stealing, and vandalism. Kolko and Kazdin (1991) reported a relationship between childhood firesetting and heightened aggression and social skills deficits (see also Forehand, Wierson, Frame, Kemptom, & Armistead, 1991).

### Sensation Seeking and Firesetting

Junger and Wiegersma (1995) examined the relationship between mild deviance and involvement in accidents, as well as common correlates of the two. Mild deviance was described in terms of gambling, drinking, smoking, soft-drug use, shoplifting, and vandalism, which are common examples of sensation seeking behavior. Results show that mild deviance and sensation seeking behaviors were related most closely with leisure time activities. Youth with limited involvement with passive leisure time activities (e.g., hanging out with friends, going out with friends, having friends who smoke, or having a job at 13 or 15 years of age) were less likely to engage in mildly deviant activities or sensation seeking behaviors (Junger & Wiegersma, 1995). These results are similar to that previously identified by Kolko and Kazdin (1988), which indicated that some firesetters engage in firesetting and destructive behaviors as a result of boredom.

### Social Skill Deficits

Juvenile firesetters often are found to have difficulty interacting with others, including family, peers, and teachers (Showers & Pickrell, 1987). These limitations in juvenile sociability are likely to reduce the opportunity for these youth to develop normative socialization skills (Kazdin, 1990). Such limited opportunities for communication and friendship may limit the psychosocial stability of these individuals, furthering their firesetting tendencies and other maladaptive behaviors (Heaven, 1994; Kazdin, 1990; Levin, 1976). Vandersall and Wiener (1970) assert that young firesetters rarely have significant friendships.

Juvenile firesetters have also been identified as viewing themselves as loners, living

emotionally apart from their families or communities. Some firesetters indicate that they engage in fireplay to impress peers. Others have stated that they set fires because they did not have peers to play with, and engaged with fire as a way to pass the time (Blumberg, 1981; Fineman, 1995; Kolko & Kazdin, 1986b). Teenagers also are more likely than younger children to involve peers in their firesetting and to brag about their destructive behaviors. It also has been theorized that some young adults initiate fireplay as they attempt to accommodate adult roles and acquire a sense of control. Though firesetting in adolescents and young adults is often associated with maladaptive psychosocial patterns, by early adulthood, most firesetters are identified as being pathological or criminals (Levin, 1976; Schwartzman et al., 1994).

#### Deviance and Vandalism

Firesetting has long been considered a form of social deviance in youth (Fineman, 1995). Loeber, DeLamatre, Keenan, & Zhang (1998) assert that deviance can be classified as behaviors that are bothersome to adult caregivers (e.g., highly stubborn behavior, lying, truancy, running away from home) or that inflict harm or property loss on others (e.g., physical aggression, vandalism, theft, violent acts). Kazdin (1990) identified that deviance in childhood is most closely connected with a diagnosis of conduct disorder (see also Barnett, Richter, Sigmund, & Spitzer, 1997; Repo & Virkkunen, 1997). Childhood deviance is often revealed in disobedience and unmanageability early in childhood, if not during pre-school age (ages 2-5 years).

While 10% of juveniles who are arrested are juvenile firesetters, they also are more likely to be involved in a greater proportion of arrests overall when compared to other arrested juveniles. Firesetters generally engage in property destruction and crimes of physical aggression, such as forcible rape (11%), nonviolent sexual offenses (18%), vandalism (19%), and arson

(35%) (Williams, 1998). Kolko and Kazdin (1991, 1994) found that adolescent firesetters, in comparison with firesetters of other ages, have higher levels of antisocial behaviors, higher levels of hostility and aggression, and are more likely to connect their deviance with covert expressions of aggression.

#### Covert Antisocial Behavior

Results indicate that firesetters tend to have conduct problems, such as disobedience and aggressiveness (Forehand, Wierson, Frame, Kemptom, & Armistead, 1991; Thomas & Grimes, 1994). Sakheim, Vidgor, Gordon, and Helprin (1985) also found that firesetters had feelings of anger and resentment over parental rejection, and that such feelings were largely expressed covertly through the use of fire. The presence of neglect, abuse, or emotional deprivation is often internalized, and is most likely to be expressed destructively through the use of fire.

#### Attention Seeking Behavior

Though largely ignored by research, attention seeking behaviors are often a factor involved in juvenile firesetting, as is the desire to get a reaction from parents, authorities and emergency services (Schwartzman et al., 1994). Behaviors classified as attention seeking would include any behavior performed to provoke others, or any negative action performed in order to attain a tangible reinforcer (Lee & Miltenberger, 1996). Luby, Reich, and Earls (1995) and Taylor and Carr (1994) found that children involved in neglectful environments were more likely than children in traditional supervision settings to engage in attention seeking behavior.

### Individual Constraints to Firesetting

Individual constraints refer to the personal structures that mitigate against deviance, an affinity for sensation seeking, and problem activity.

#### Fire-Safety Skills

Juvenile firesetters who accidentally set fires are likely to lack an understanding of the dangerousness of fireplay (Canter & Frizon, 1998; Lester, 1975). Many fire professionals believe that educating youth about fire safety and the dangers of fireplay can reduce the recidivism rate among juvenile firesetters (Federal Emergency Management Agency, 1996). Also, psychoeducational interventions may reduce recidivism rates in juvenile firesetters following the integration of fire safety measures within educational programming, general childcare systems, or family welfare schemes (Adler, Nunn, Northam, Lebnan, et al., 1994; Eisler, 1972).

#### Environmental Issues

Further consideration needs to be made of the environmental characteristics and inter-individual dynamics that relate to the firesetting of juveniles. Environmental characteristics are defined as supports, controls, models and expectations of others that are thought to be meaningful phenomena to the juvenile (Jessor, 1987). Fireplay and firesetting behaviors usually can be identified by the firesetter's immediate and surrounding environments (Achenbach, 1966). Achenbach's (1966) theory is similar to the tentative risk model originally identified by Kolko & Kazdin (1986b). Jessor & Jessor (1973) and Jessor (1981) have argued that variability in problem behaviors stems largely from differences in perceptions of environmental characteristics.

### Environmental Proximal Controls for Firesetting

Kolko and Kazdin (1994) assert that adolescent, parent, and family characteristics promote firesetting and a continuation of patterns of firesetting. Moderate youth firesetting has been associated with limited family sociability, whereas recidivism has been associated with lax discipline, family conflict, limited parental acceptance, and family affiliation (Kolko & Kazdin, 1994). Parental influences such as limited supervision and monitoring, early learning experiences and cues with fire, parental distance and uninvolved involvement, and parental pathology have been identified as predictors of juvenile firesetting (Kolko & Kazdin, 1985, 1986a, 1991).

#### Limited Supervision

Kolko and Kazdin (1991) have identified correlates between parental maladaptive behaviors and child maladaptive behaviors (Kolko & Kazdin, 1988). However, few professionals examine such environmental conditions when working with firesetters (Federal Emergency Management Agency, 1988, 1995, 1996). In reviewing the relations between family dynamics and juvenile firesetting behaviors, Squires and Busuttill (1995) determined that a significant number of house fires were directly related to the activities of adults in the home. Poor supervision and a lax child-care environment were found to be better predictors of recidivism in children than individual factors (see also Kolko & Kazdin, 1988; Showers & Pickrell, 1987). Moreover, adults spent a limited amount of time keeping track of incendiaries in the home, which increased juvenile access and ability to set fires (Squires & Busuttill, 1995).

#### Early learning Experiences

Exposure to fire at an early age may increase the likelihood that children will engage in maladaptive firesetting behaviors (Jackson, Glass, & Hope, 1987; Kolko & Kazdin, 1986, 1991;

Yarnell, 1940). Parents and other significant family members serve as models that can either reinforce or reject their children's firesetting behavior. Learning experiences and cues that can preclude maladaptive firesetting include early modeling of inappropriate use of fire, early interest and direct experience with fire, and availability of adult models and incendiary materials.

#### Parental Un-involvement

Firesetting in young children has been identified as being largely the result of a neglectful family environment (Gaynor & Hatcher, 1987). Macht & Mack (1968) have asserted that the family environment of the childhood firesetter is likely to be chaotic and limited in nurturing behaviors. Patterson (1982) believes that childhood firesetters show the beginnings of antisocial behaviors, and that the externalization of emotions through firesetting resembles adolescents who are victims of abuse and neglect. As a result of these theories, unwanted and unacceptable childhood behaviors are thought to be largely the result of a neglectful and abusive home environments.

Neglectful behavioral patterns of parents and caregivers may place children at a higher risk for match playing, destruction and violence through the use of fire. Kolko and Kazdin (1994) found that access to incendiaries, lack of adolescent remorse, and lack of parental consequences for negative behavior were associated with follow-up recidivism (multiple incidence of firesetting). Furthermore, Squires and Busuttil (1995) assert that the fatality rate connected with juvenile firesetting could be significantly reduced if abusive and neglectful behavior or uninvolved with children was reduced and parental support was increased.

### Parental Pathology and Limitations

Some firesetting adolescents engage in destructive behaviors as a result of family context. Psychosocial maladjustment has been related to family dysfunction (Bumpass, Fagelman, & Brix, 1983; Kazdin, 1990; Kolko & Kazdin, 1992). Saunders and Awad (1991) assert that adolescent firesetters are likely to experience parental separation, violence within the home, parental alcohol and drug abuse, or some form of physical or sexual abuse. Firesetters experience significantly more emotional neglect and physical abuse than other children of similar socioeconomic and geographic backgrounds (Thomas & Grimes, 1994). These juveniles also were more likely to have parents with limited parenting skills, which is thought to have implications for these youths' ability to cope with family pathology.

The impact of pathology and limitations from parents and families on juvenile firesetters can be reduced with interventions. Increased fire-proofing within the home, improved psychosocial stability of individuals within the home, respite care, crisis intervention, and social service involvement have helped to redefine the roles of parents and firesetting youth. It is thought that counseling and psychoeducational interventions can help a family to redefine the roles and environmental factors that lead to recidivism in firesetting youth (Jackson, Glass, & Hope, 1987; Kolko & Kazdin, 1992).

### Environmental Distal Controls of Firesetting

Peer influence. Youth firesetters differ in the ways that incendiaries are obtained or utilized, but many juveniles indicate that they receive incendiaries from peers. Moreover, juvenile firesetters differ in the peers they emulate (Kolko & Kazdin, 1986a). Vandersall and

Wiener (1970) assert that many teenagers receive incendiaries from peers, which are later used to start fires. The presence of peers who smoke, peers that play with fire, peer pressure to participate in firesetting, or the presence of materials left around by parents or peers can all be factors which preclude the setting of a fire (Kolko & Kazdin, 1986a).

An interesting theory in a recent study has pointed to the impact of leisure time activities on the development of delinquency in adolescents. It has been found that adolescents may engage in firesetting behaviors as a result of limited opportunities to fill their time with other activities. Adolescents have indicated that they engage in fireplay out of limited involvement with others, rather than for other destructive or maladaptive reasons (Slavkin, in press). Juveniles with large amounts of freetime and limited involvement with leisure time activities (e.g., hanging out with friends, going out with friends, having friends who smoke, or having a job at 13 or 15 years of age) may be more likely to engage in deviant activities, violent activities, or firesetting. These results are similar to that previously identified by Kolko and Kazdin (1988), which indicated that some firesetters engage in these behaviors as a result of boredom.

#### Stressful External Events

As previously stated, most juvenile firesetters have difficulty with social skills and a general inability to deal with everyday stressors (Stewart & Culver, 1982; Winget & Whitman, 1973). The importance of interindividual systems in impacting the behaviors of developing individuals cannot be underestimated (Broffebrenner, 1977). Stressful environmental circumstances, individual crises, and limited support at home are often the precursors to property damage through use of fire.

### Firesetting Across Childhood and Adolescence

Examination of the differences between age groups also will improve professionals' understanding of this maladaptive behavior. It is believed that maladaptive firesetting behaviors differ across childhood and adolescence as a result of developmental changes (Jackson, Glass, & Hope, 1987; Kolko, 1985). Patterson (1982) asserts that firesetters of different types and ages require different explanations for their firesetting behaviors. Previous studies have identified that as children get older, their firesetting is directed away from their homes and involves neighborhood buildings, dumpsters, automobiles, and schools (Schwartzman, Stambaugh, & Kimball, 1994). It is hypothesized that juvenile firesetting follows an age-related developmental trend, with preadolescents showing greater levels of firesetting behaviors than other age groups.

#### Firesetting in Childhood (Ages 3 to 6 years)

Studies of firesetting behavior in children are limited, even though it constitutes a fairly frequent and dangerous set of childhood behaviors (Morrison, 1969). In connection with an orientation to psychodynamic ideas firesetting in young childhood is often assumed to involve some inherent or biologically primary/instinctual drive (Levin, 1976). Firesetting in young children also is more likely to result in greater destructiveness to property and loss of life than the firesetting of any other age group (Showers & Pickrell, 1987). However, firesetting in young children has been identified as being related to a neglectful family environment (Gaynor & Hatcher, 1987). Macht & Mack (1968) have asserted that the family environment of the childhood firesetter is chaotic and limited in nurturing behaviors. Patterson (1982) believes that childhood firesetters show the beginnings of antisocial behaviors. The externalization of

emotions through firesetting resembles adolescents who engage in similar violent acts. As a result of these theories, unwanted and unacceptable childhood behaviors are thought to be largely the result of a neglectful and abusive home environment.

Kolko (1985) found that childhood firesetters can be characterized as having multiple behavior problems with few internalizing behaviors, such as depression, but many externalizing behaviors, such as rule breaking, aggression, and destruction. Children from the age of three to six years spend a great deal of their time mimicking behaviors seen in their immediate environments. Parents often use fire without adequately educating their children about appropriate uses of fire. Early childhood educators and developmentalists stress that children at this age have little remorse for negative behaviors, and are generally unable to understand the danger of fireplay. Further, few children under the age of seven can comprehend the devastation and destruction that can come from lighting a single match.

Moreover, Vandersall and Wiener (1970) assert that some young firesetters rarely have significant friendships, and have a tendency to view themselves as loners, living outside their families or communities. Hanson et al. (1995) strongly advise against limiting the opportunity for mental health involvement following the firesetting act. Limited access to counseling may increase the likelihood that the firesetter will continue to engage in destructive behaviors (Hanson et al., 1994).

### Firesetting in Preadolescent Children (Ages 7 to 10 Years)

While juveniles below the age of 13 were involved in 10% of all juvenile arrests, they were involved in a great proportion of arrests overall from property destruction and crimes of physical aggression, such as forcible rape (11%), nonviolent sexual offenses (18%), vandalism (19%), and arson (35%) (Williams, 1998). Preadolescents have greater awareness of the danger involved in fireplay. However, they also are more likely to begin experimenting with behaviors that are discouraged by parents or other adults.

Firesetting behaviors are not normal behaviors for preadolescents or adolescents (Levin, 1976). Because many firesetters under the age of 12 are diverted from the juvenile justice system, the real incidence of preadolescent firesetters is unknown (Federal Emergency Management Agency, 1996). Children between the ages of 7 and 12 are the most understudied group of all firesetters (Kolko, 1985).

### Firesetting in Early Adolescents (Ages 11 to 14 Years)

Firesetting in this age group has been found to differ for motivational reasons as well. Showers and Pickrell (1987) found that those over the age of 12 are motivated to use fire for revenge. Achenbach (1966) theorized that internalization or externalization of behaviors largely impacts aggression in children and early adolescents. Early adolescents who internalize emotions tend to report depressive or somatic symptoms, while juveniles who externalize emotions through their behaviors show a higher level of acting out against others. Achenbach placed maladaptive firesetting behaviors within this category. Kolko and Kazdin (1991) have largely

supported these findings, in that early adolescent firesetters have higher levels of antisocial behaviors, higher levels of behavioral problems, and higher levels of hostility and aggression. Examination of this age group shows that most adolescent firesetters are at the lower end of the age group around 13-14 years of age (Schwartzman et al., 1994).

#### Firesetting in Late Adolescents (Ages 15 to 18 Years)

Firesetting among late adolescents typically involves delinquent activities, and usually occurs as a result of peer pressure or group oriented activities. Attention seeking behaviors are often a factor involved in their firesetting, as is the desire to get a reaction from parents, authorities and emergency services (Schwartzman et al., 1994). Research indicates that a subgroup of antisocial recidivist firesetters exists among young offenders (Hanson et al., 1994). Late adolescents who set fires often start with small and insignificant fires, then move onto larger and more destructive fires as they gain confidence and experience. Teenagers also are more likely than younger children to involve peers in their firesetting and to brag about their destructive behaviors.

#### Firesetting in Young Adults (Above Age 18 Years)

Firesetting in young adulthood is most likely to be the result of pathology and serious mental illness (Levin, 1976). Some young adults initiate maladaptive fireplay as they are attempting to assimilate into more adult roles and attempt to acquire a greater sense of control. However, most of these individuals show elaborate patterns of destruction, have higher use of incendiaries, and also have a greater likelihood of conduct problems, aggression problems, and

criminality (Schwartzman et al., 1994). Geller (1992) challenges that unlike firesetters in other age groups, adult firesetters tend to set fires in the same fashion and organize their behaviors around specific settings, as opposed to younger firesetters, who set fires randomly and in different settings.

The current review is based on the premise that aberrant behavior, such as firesetting, occurs because some children and adolescents suffer from weak or nonexistent bonds to society, which causes them to behave in socially unacceptable ways. Juvenile firesetting may be one example of larger problems with aggression, deviance, vandalism, or sensation seeking behaviors.

### Summary

An examination of the literature to date on firesetters shows that a variety of different characteristics can define specific types of firesetters. Furthermore, firesetting behaviors appear to differ as a result of both individual and environmental circumstances. An appropriate review of firesetting should include an examination of the firesetter's history; such as with prior fire learning experiences, cognitive and behavioral reviews, and parent and family influences and stressors.

## SECTION G---IMPLICATIONS FOR PRACTICE AND FUTURE INTERVENTIONS

### Overview

While much time has been spent in this document organizing ideas and themes that have been of importance in intervening on the behalf of juvenile firesetters in the past, the document would not be complete without specific instructions for future practice and interventions. The purpose of this section is to review the implications of the preceding discussion, and to state specifically what can be done during the next phase of the NASFM grant to reduce juvenile firesetting recidivism. Specific tasks will be reviewed as they pertain to the juvenile firesetters' proximal (immediate) and distal (surrounding) environments. Proximal interventions will include challenging the family and school systems with which juvenile firesetters interact. Distal interventions will include challenging the mental health system, fire professionals, and business communities. Distal interventions also will include a discussion of factors that can be initiated at a statewide and national level that will have implications for policy and practice with juvenile firesetters.

### Proximal Interventions

Proximal interventions will include challenging the family and school systems with which juvenile firesetters interact.

### Challenging the Family System

Another unique aspect of any interventions for juvenile firesetters is the importance of establishing some remediation or reorganization within the family. As described in the dynamic-behavioral model, firesetting is an interaction of personality, social, and environmental factors. It is critical that the family system is examined and that roles are re-organized, in order to begin to intervene and redirect these maladaptive behaviors into healthier choices.

### Challenging the School System

Schools in recent years have directed a significant amount of funds to programs dealing with violence. Because schools today spend more time with children than many parents, they become a great partner. Schools can be a neutral ground for fire professionals and families to meet to discuss issues and provide psychoeducation. When children are exposed to psychoeducation and crisis management in a familiar setting (where they are often seen as being citizens and in control of their own destinies), the likelihood of effective treatment is increased.

Other strategies that might be used in order to use schools to assist juvenile firesetters are:

1. Counseling resources are available in every school community that may be obtained free of charge.
2. Counselors in elementary and secondary schools already are familiar with juvenile

- issues, and may serve as effective interventionists between families and fire professionals.
3. Existing systems, such as schools, can be utilized to spread awareness of the impact that juvenile firesetting has on communities.

### Distal Interventions

Firesetting is not just a fire department issue. It is a family as well as a community issue. When a fire is set in a community, everyone is impacted. The family, the fire department and the community feel the dynamics of the incident. Distal interventions will include challenging the mental health system, fire professionals, and business communities. Distal interventions also will include a discussion of factors that can be initiated at a statewide and national level that will have implications for policy and practice.

### Challenging the Mental Health System

Probably the biggest issue facing juvenile firesetting is the limited understanding that mental health professionals have in acknowledging that juvenile firesetting is a problem. As a result of this limited awareness, few professionals in the field recognize the impact that juvenile firesetting has on the families they treat or the communities they serve. Therefore, it is imperative that a multi-faceted approach be developed to raise awareness and establish a need for training in the mental health field. It is equally important that the methods used to deliver this training utilize state of the art training technologies to encourage interest and maximize exposure.

The following recommendations are designed to improve awareness of the problem, and

increase training and tasks designed to serve as interventions.

1. Establish a formal linkage with the American Psychotherapy Association (APA) to establish a committee to continue to look at training issues over a two-year period.
2. Explore critical partnerships with other national organizations that could partner with the above-established entities to further explore support and training. Funding needs to be allocated for travel and advocacy to meet with heads of major organizations and attend annual meetings and conferences to facilitate contacts and networking on an on-going basis.
3. Design a web-supported course for mental health professionals. The course needs to be designed to allow for some interaction for clinical training, supervision and feedback. A well-marketed "train the trainer program" that would be targeted and supported by a clinical team (this team). NASFM could accomplish this over time.
4. It is important that training materials be created on CD-ROM which include forms, assessment models, sample interviews, fire data and education materials, etc. This could help increase the ease at which information is disseminated to professionals in many areas of mental health and fire prevention.
5. It is recommended that an aggressive awareness campaign regarding issues and service difficulties be targeted at newspapers, and magazines (e.g., Newsweek, Time, etc.).
6. Write a series of informational articles based on treatment methods and interface with fire service for professional journals and publications.
7. In order for juvenile firesetters from both socioeconomically limited and wealthy

families to receive services, it is recommended that State Fire Marshals sponsor the development of the Fire Intervention Mentor Model (FIMM). This model will allow for the training of key mental health personnel in various municipalities.

### Challenging Fire Professionals and Law Enforcement

Very few fire professionals have received any formal, recognized training in either the evaluation or treatment of juvenile firesetting behavior. Many indicated that they were amenable to attending training opportunities, if available. However, few indicated any knowledge of such opportunities in their area. The ability to develop a successful intervention for those juveniles who set fires requires an understanding of those factors that contribute to the behavior. The efficacy of a solid juvenile firesetter intervention program requires that fire professionals and law enforcement receive initial training similar to mental health professionals, training that indicates effective ways that communities can reduce rates of recidivism.

The following recommendations are designed to improve awareness of the problem, and increase training and tasks designed to serve as interventions:

1. Fire professionals and law enforcement should meet to create programming that can co-exist with mental health interventions. By using a seven-step problem-solving technique (Ritchey & Janekowski, 1989), fire professionals can begin to formulate plans that can organize their movement against recidivism in their communities.
2. Fire professionals and law enforcement should be responsible to reach out to mental health providers in their community. The fire service can provide mental health

- professionals with a basic understanding of juvenile firesetters. The fire service also can become a steady source of referrals to mental health professionals.
3. Both mental health and fire professionals must make the effort to learn and understand the culture of the other.
  4. Roles of professionals must be clearly defined and agreed upon by both parties.
  5. Fire departments should seek out mental health professionals who already have the skills needed to provide service to children, adolescents, and families.
  6. Fire Service and Fire Departments should provide assessment and education.
  7. Fire Service use one of the recognized assessment tools that are available.
  8. Create a specialization for Mental Health Professionals in the area of Juvenile Firesetting that is administered by NASFM or other national organization.

### Challenging the Business Community

Funding mental health treatment for firesetters and their families is necessary and valuable to the community. Historically these programs are funded through insurance, Medicaid, and state and local funding sources. However, some states have found alternative resources helpful when state funding is reduced. When a department approaches an organization for funding it must realize that it has a grantworthy cause, that the project is necessary and valuable to the community and that the fire department itself has budgeted some of its own monies for this purpose.

The following recommendations are designed to improve awareness of the problem, and increase training and tasks designed to serve as interventions:

1. Involve insurance companies as community organizations that can provide both financial support and assistance in increasing communication and awareness about juvenile firesetting.
2. Begin to disseminate information to businesses within your community about general information that can assist in beginning a program. Businesses search out "causes" that are high profile - firesetting could be one of them.
3. Since businesses are members of the larger community, provide businesses the opportunity to understand that they need to get involved in reducing recidivism in order to effectively improve the financial viability of their surroundings.
4. Help business communities to understand that if they spend money on education, intervention, and prevention that they may reduce their spending on community dollar loss from runs related to juvenile firesetting (fire impact).

#### State-wide and National-level Challenges

One way to effectively reduce firesetting in any community is by working together as a community. Bringing many different organizations together to solve a single problem is most effective. A synergy is created around the problem. Many different types of agencies and organizations may be approached as potential partners in the effort to fund the mental health component.

Several potential solutions may be tried simultaneously in order to effectively counter the limitations that face communities attempting to help juvenile firesetters. The following

recommendations are designed to improve awareness of the problem, and increase training and tasks designed to serve as interventions:

1. Creative funding for treatment of firesetting children and caregivers must be a priority for any professional involved with juvenile firesetter intervention. The cost for not providing the much-needed services will be far greater in the long run.
2. Involvement by insurers with funding programs, losses (both life and property) can be reduced or mitigated in the future by a proactive involvement in funding of treatment programs and providing other resources for juvenile firesetter intervention programs.
3. Promote active involvement in firesetting issues by schools by providing training on firesetter issues.
4. In order to obtain optimal results a juvenile firesetter intervention program must be marketed effectively in the community. A high visibility will increase the accessibility and participation in the program and funding for the treatment of at-risk firesetters.
5. Children's protective service agencies have, by law, an obligation to protect children from abuse and neglect. A significant portion of high-risk firesetters is a victim of abuse and neglect. This agency can provide support and wrap-around services to address the issues of juvenile firesetting.
6. Additionally, the ability exists to provide an effective link between all agencies with the justice system.
7. Within the juvenile court system diversion programs exist for many types of juvenile criminal activity such as drugs, sex abuse and violence. Many of these programs are relevant to firesetters.

8. University systems which train counselors, psychologists, or sociologists can be accessed to assist with helping juvenile firesetters
9. Universities who are seeking placements for interns and residents may be placed in fire departments or in mental health organizations for the specific purpose of working with juvenile firesetters.
10. Mental health professionals who do pro-bono work in their communities can be used to increase services to disadvantaged juvenile firesetters and their families.
- 11.

### Summary

The challenges discussed above can provided juvenile firesetters with a range of proximal and distal supports, from short-term counseling, day-treatment programs, in-patient hospital to residential treatment programs. Partnering with many different types of agencies, fire department budgeted monies, as well as creative funding for all components of a firesetter program, especially the mental health component, provides direct and indirect benefits to the customers in all of our communities. Ultimately, the energy committed in these areas most definitely will be well spent.

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APPENDIX A \_\_\_\_\_ Types of Firesetters

Type of Firesetter	Characteristics
Curiosity Type	Younger children who do not understand consequences of their behavior. Desire is to watch the flame. Hyperactivity or attention deficit may be present. No intent to cause harm. Traditional childhood diagnosis.
Accidental Type	Usually involves children under 11. Teenagers playing scientist. The fire results from no destructive motive to create fire.
The "Cry for Help" Type  Include diagnosis of ADHD, Depression NOS, Major Depression, ODD, PTSD	Includes those offenders who consciously or subconsciously wish to bring attention to an interpersonal dysfunction (depression) to an interpersonal dysfunction (abuse at home, vicarious observation of parental conflict). Not meant to harm people. Good prognosis for treatment. Firefighter who sets fires or adult/juvenile "would be hero types" - seeking the attention of peers or the community in order to discover or help put out fires they start. Traditional childhood diagnosis for abused individuals.
Delinquent Type (Adolescent) or Antisocial Type (Adult)	Includes the fire for profit type and the cover another crime type. Interest in vandalism and hate crimes is noteworthy. As juveniles, this type shows little empathy for others. Shows little conscious. Juvenile types rarely harms others with fire. Significant property damage is common. As adults, significant percentage harm others. Firesetting behavior is more easily extinguished than other personality and behavior problems, which usually accompany the firesetting.
Severely Disturbed Type	Includes the sensory reinforcement controlled type and the self-harm type. Included paranoid and psychotic types for whom the fixation of fire may be a major factor in the development of a mental disorder. Sensory aspects of the fire are sufficiently reinforcing to cause fires to be frequently set. Pyromaniac is a sub-type - sensory reinforcement is often powerful enough for significant harm to occur. Self-harm type uses fire to harm or kill himself/herself. Prognosis is guarded with this group.
Cognitively Impaired Type (Include diagnosis of ADD, ADHD, LD, MMR, etc.)	Includes the retarded and the organically impaired types. Tends to avoid intention harm, lack good judgment. Significant property damage is common. Prognostically, they are good therapy candidates. Also included in this group are persons with severe learning disabilities, those affected by fetal alcohol syndrome, or by drugs taken by their mother during pregnancy.
Sociocultural Type	Includes the uncontrolled mass hysteria type, the attention to cause type, the religious type, and the satanic type. Arsonists who set fires primarily for the support they get for doing so by groups within their communities. Those who may set fires in the midst of civil unrest, and are either enraged and enticed by the activity of others and follow suit, or set fires with deliberation in order to call attention to the righteousness of their cause. Frequently lose control and harm others. Most are amenable to treatment.

Note. From "A Model for the Qualitative Analysis of Child and Adult Fire Deviant Behavior," by K. Fineman, 1995, *American Journal of Forensic Psychology*, 13, p. 34. Adapted with permission of the author.

APPENDIX B Characteristics Used to Define the Category of Firesetter

Category	Characteristics
Curiosity Type	engage in fireplay as experimentation often show remorse for their behaviors following the incident tend not to understand the consequences of their behaviors early involvement with fireplay start a fire in a desire to watch a flame
Accidental Type	teenagers engaging in experimental fireplay or those playing scientist young adult accidents or adult carelessness hold no intent to cause harm
“Cry for Help” Type	attempt to bring attention to their individual or familial dysfunction not thought to mean to cause harm or damage inability to appropriately express themselves set fires in order to be seen as would be hero types some history of abuse or neglect
Delinquent Type	set fire for profit and those that set fire to cover another have an interest in vandalism and hate crimes. as preadolescent firesetters, this group shows some empathy for others as adolescent firesetters show little empathy for others higher rates of other deviant behaviors immediately preceding firesetting
Severely Disturbed Type	diagnosed by a wide variety of individual pathologies early signs as a result of individual psychopathology

more likely to be found in an inpatient population  
high incidents of recidivism  
may be paranoid and/or  
pyromaniac is a sub-type of the severely disturbed category

Cognitively Impaired Type diagnoses such as attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), learning disabled (LD), or mildly mentally retarded (MMR), as well as those youth who are retarded or have some organic brain dysfunction. also included in this group are persons with severe learning disabilities, those affected by fetal alcohol syndrome, or by drugs taken by their mother during pregnancy.

Sociocultural Type young adult or adult arsonists  
set fires primarily for the support they get for doing so by groups  
typically are in the midst of civil unrest  
enraged or enticed by the activity of others and follow suit

## APPENDIX C Appendix of Terms

Abuse - A series of harmful behaviors and actions as defined by local law that places an individual at risk requires reporting. See Section 7-2 NFPA 1035-Proposed.

Accident - An unplanned event that interrupts an activity and sometimes causes injury or damage. A chance occurrence arising from unknown causes; an unexpected happening due to carelessness, ignorance, and the like. NFPA 921 1998 Edition.

Accidental firesetter - This type of firesetter usually involves children under the age of 11 years. It also may include teenagers playing scientist. The fire results from no destructive motive to create fire (Fineman, 1995).

Arson - The crime of maliciously and intentionally, or recklessly starting a fire or causing an explosion. Precise legal definitions vary among jurisdictions, wherein it is defined by statutes and judicial decisions. NFPA 921 1998 Edition.

CHINS - Child in need of service. There are numerous elements to Indiana's legal definition. See Section 7-2; NFPA 1035-Proposed.

Cognitively Impaired firesetter (Include diagnosis of ADD, ADHD, LD, MMR, etc.) - This type of firesetter includes the retarded and the mentally impaired individuals. These firesetters tend to avoid intention harm, but lack good judgment. Significant property damage is common. Prognistically, they are good therapy candidates. Also included in this group are persons with severe learning disabilities, those affected by fetal alcohol syndrome, or by drugs taken by their mother during pregnancy (Fineman, 1995).

Confidentiality - Principle that recognizes the privacy of individuals (within limits) of law and professional ethics. See Section 7-2; NPFA 1035-Proposed.

Core Intervention - Programs that provide long-term help for juvenile firesetters and their families to eliminate firesetting behavior and remediate the accompanying psychopathology. See Section 7-2; NFPA 1035-Proposed.

The "Cry for Help" firesetter - Include diagnosis of ADHD, Depression NOS, Major Depression, ODD, PTSD. This type of firesetter includes those offenders whom consciously or subconsciously wish to bring attention to an interpersonal dysfunction (depression) to an interpersonal dysfunction (abuse at home, vicarious observation of parental conflict). The use of fire or fireplay is not meant to harm people. These juveniles have a good prognosis for treatment. A subsection of this type is the firefighter who sets fires or adult/juvenile "would be hero types" - seeking the attention of peers or the community in order to discover or help put out fires they start. The "cry for help" type is the traditional childhood diagnosis for abused

individuals (Fineman, 1995).

Curiosity firesetter - Typically this firesetter is a younger child, who do not understand the consequences of their behavior. The motivation to fireset is the desire is to watch the flame. There is generally no intent to cause harm. The curiosity firesetter is the traditional childhood diagnosis. Hyperactivity or an attention deficit may be present (Fineman, 1995).

Custodian - A person with whom a child resides. See Section 7-2; NFPA 1035-Proposed.

Delinquent firesetter (Adolescent) or Antisocial firesetter (Adult) - The delinquent or antisocial firesetter includes the fire for profit type and the cover another crime type. These firesettlers' interest in vandalism and hate crimes is noteworthy. As juveniles, this type shows little empathy for others, and shows little conscious. Juvenile types rarely harms others with fire, but significant property damage is common. As adults, a significant percentage of these firesettlers harm others. Firesetting behavior is more easily extinguished than other personality and behavior problems, which usually accompany the firesetting (Fineman, 1995).

Early Intervention - Programs aimed to identify children at risk for participating in unsupervised fireplay and firesetting incidents. See Section 7-2; NFPA 1035-Proposed.

Fireplay - No actual fire set. Fireplay may progress to firesetting and should therefore be addressed as early and rapidly as possible. See Section 7-2; NFPA 1035-Proposed.

Firesetting - Any unsanctioned, noninstructional use of fire involvement, including both intentional and unintentional involvement, whether or not an actual fire occurred. See Section 7-2; NFPA 1035-Proposed.

Foster Parent - An individual who provide care and supervision to a child, a foster home, or a home approved as a foster home. See Section 7-2; NFPA 1035-Proposed.

Guardian - A person appointed by a court to have the care and custody of a child or the child's estate, or both. See Section 7-2; NFPA 1035-Proposed.

Incendiary Fire - The incendiary fire is deliberately ignited under circumstances in which the person knows that the fire should not be ignited. NFPA 921 1998 Edition; See Section 12-2.3.

Intake forms - Consistent body of information collected about an individual as a prerequisite to intervention. See Section 7-2; NFPA 1035-Proposed.

Intentionally - Person's conscious objective to do the act. See Section 7-2; NFPA 1035-Proposed. NFPA 921 1998 Edition; See Section 12-2.3.

Interagency network - A group of agencies (public safety, social services, education, mental

health, law enforcement, and juvenile justice) working a formal partnership to address juvenile firesetting. See Section 7-2; NFPA 1035-Proposed.

Intervention - Formal response to firesetting behavior that may include evaluation and education, counseling, medial, social services, and juvenile justice sanctions. See Section 7-2; NFPA 1035-Proposed.

Interview - A structured process by which relevant information is gathered for the purpose of determining specific intervention. See Section 7-2; NFPA 1035-Proposed.

Juvenile - A person who is under eighteen years of age. NFPA 921 1998 Edition; See Section 12-2.3.

Knowingly - If the act is willed and is done with an awareness of the probable consequences. See Section 7-2; NFPA 1035-Proposed.

Neglect - Failure to act on behalf of or in protection of an individual in your care. See Section 7-2; NFPA 1035-Proposed.

Parent - A biological or adoptive caregiver. Unless otherwise specified, it includes both parents, regardless of their marital status. See Section 7-2; NFPA 1035-Proposed.

Primary prevention - Programs aimed at reducing juvenile involvement in first-time unsupervised fireplay and firesetting incidents. See Section 7-2; NFPA 1035-Proposed.

Referral - An act or process by which a juvenile firesetter and family gain access to a program. See Section 7-2; NFPA 1035-Proposed.

Severely Disturbed firesetter - This category of firesetter includes paranoid and psychotic types for whom the fixation of fire may be a major factor in the development of a mental disorder. Sensory aspects of the fire (e.g. - the flame, smoke, the heat produced) are sufficiently reinforcing to cause fires to be frequently set. Pyromaniac is a sub-type - sensory reinforcement is often powerful enough for significant harm to occur. Self-harm type uses fire to harm or kill himself/herself. Prognosis is guarded with this group (Fineman, 1995).

Sociocultural firesetter - The sociocultural firesetter includes the uncontrolled "mass hysteria type," the attention to cause harm type, the religious type, and the satanic type. These are generally arsonists who set fires primarily for the support they get for doing so by groups within their communities. They also are those who may set fires in the midst of civil unrest, and are either enraged and enticed by the activity of others and follow suit, or set fires with deliberation in order to call attention to the righteousness of their cause. They frequently lose control and harm others. Treatment is often guarded with this group (Fineman, 1995).

