

What is TAPP-C?

The Arson Prevention Program for Children (TAPP-C) was developed in the early 1990s as an empirically-based assessment and intervention program to address the firesetting behaviours of children and youth.

TAPP-C is a collaborative program that brings together fire service and mental health professionals to work with children, teens and their families to eliminate dangerous fire-related behaviours. Fire service professionals provide children and teens and their families with home fire-safety checks and fire-safety education, and mental health professionals conduct risk assessments and provide parent- and child-focused treatment within a mental health framework.

TAPP-C was developed as a joint venture of the Centre for Addiction and Mental Health, the Office of the Fire Marshal of Ontario and the Toronto Fire Services. Each of these organizations continues to provide TAPP-C with ongoing support.

The mental health treatment component of TAPP-C is a brief intervention program with two modules: one for parents and caregivers (who in this manual are referred to collectively as *caregivers*) and another, similar module for children and youth (who in this manual are referred to collectively as *children*).

The intervention program has been designed to specifically address firesetting and all other types of inappropriate fire involvement by children and adolescents. It uses principles of parent management training (PMT) for caregivers (Cunningham, Bremner & Boyle, 1995; Kazdin, Siegel & Bass, 1992; Webster-Stratton, Hollinsworth & Kolpacoff, 1989) and elements of cognitive behaviour therapy (CBT) for children and youth (Augimeri, Koegl & Goldberg, 2001; Kazdin, Bass, Siegel & Thomas, 1989; Kendall & Braswell, 1993; Larson & Lochman, 2002; Webster, Augimeri & Koegl, 2002).

The treatment component of TAPP-C is considered one piece of a broad range of services that may be necessary to provide to children and their caregivers in order to adequately address children's fire

involvement. Ideally, prior to providing the treatment component of TAPP-C, children's firesetting risk should be evaluated using a combination of specialized firesetting risk assessment and general mental health assessment. Based on the results of these assessments, particular children may be provided with the TAPP-C treatment component in combination with more general mental health treatment; other children, whose firesetting risk is determined to be low, may receive the TAPP-C treatment as a stand-alone intervention.

Why is there a need for a brief intervention designed specifically for fire involvement?

Many of the children and adolescents who have been involved with starting fires or playing with matches or lighters also have other clinically significant difficulties (Kolko, 1996). These difficulties often include disruptive behaviour disorders, such as Attention-Deficit/Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD), as well as more general family, peer and/or academic difficulties. While these difficulties are important for treatment planning, firesetting and other types of fire involvement are important to address early in treatment for a number of reasons.

First, and most importantly, all types of fire involvement, regardless of motivation or intention, have the potential to cause significant injury or even death, not only to the child involved, but also to others in the vicinity, house or building. In addition, all types of fire involvement have the potential to cause significant property damage. Because of the associated risk of injury, caregivers, children and adolescents may be more easily motivated to address fire involvement than some of the other difficulties that may be present.

Second, fire involvement requires fire-starting materials and opportunities to engage in fire-related behaviours. These aspects of fire involvement provide specific and concrete targets for intervention that may provide greater opportunities for successful intervention than more general behavioural difficulties, such as poor peer relations.

Lastly, in many cases, fire involvement is a specific instance of a child or adolescent's broader-based behavioural difficulties. As such, it provides an opportunity for caregivers, children and adolescents to develop skills that are transferable to the management of other problems. Once learned, these skills can be used to address some of the other difficulties they may be experiencing.

What does the treatment component of TAPP-C involve?

The TAPP-C intervention approach is collaborative, involving clinicians, caregivers and children working together to address fire involvement. The role of the clinician is to help caregivers and children develop and implement their own individualized solutions to the fire involvement.

Parent management training (PMT) programs have been developed to help the parents of children with disruptive behaviour enhance their skills in reducing their children's difficult behaviours. Similar to such PMT programs, one of the goals of the treatment component of TAPP-C is to help enhance the skills of the caregivers of children with identified fire-related behaviours, in part by promoting their children's fire-safe behaviours. As well, the TAPP-C intervention addresses parental supervision and monitoring practices, reinforcing and consequenceing behaviour, and planning for future difficulties within the context of the child's fire involvement.

Similar to cognitive behaviour therapy (CBT) programs that have been developed for children and adolescents with impulse control difficulties (e.g., Earls Court Child and Family Centre, 2001a, 2001b), the TAPP-C intervention program also aims to provide children and adolescents with strategies to recognize and control their fire-related impulses and behaviours.

The treatment component of TAPP-C is derived from a social learning theoretical framework and is based on the following three principles:

1. Fire involvement by children and teens indicates an absence of fire-safe behaviours.
2. Fire-related behaviours are learned.
3. The family home—or an alternative caregiving environment—is an important setting for learning fire-safe behaviours.

The TAPP-C treatment component involves approximately five 90-minute sessions with the caregiver(s) and five 90-minute sessions with the child. The caregiver and child sessions contain some overlapping content and some content that is unique to each.

Ideally, two clinicians are available to work independently with the child and caregiver(s) for each session so that the child and caregiver modules can run concurrently. With this model, each session begins and ends with a joint meeting of the caregiver and child together with the clinicians. The purpose of the joint meetings is to enhance co-operation by jointly reviewing the core content of the session and the home practice exercises. If only one clinician is available, alternative models are possible.

Each treatment session includes:

- checking in about any further fire involvement
- reviewing information about the child's fire-specific experience related to the session topic
- psychoeducation about a target skill for that session
- in-session practice of the new skill and
- take-home exercises for skill development.

Using intervention strategies that emphasize active client participation has been found to provide greater treatment efficacy (Bloomquist & Schnell, 2002; Reid, Patterson & Snyder, 2002). Accordingly, the TAPP-C treatment component places heavy emphasis on client participation and practice. For example, clinicians are encouraged to guide participants through thoughtful questions so that participants will generate their own plans for

addressing the fire involvement, identify obstacles to implementing those plans, and come up with their own potential solutions to likely barriers.

The TAPP-C treatment component includes the following topics:

- the dangerousness of fire involvement
- the importance of fire-safe attitudes
- the role of fire-safe behaviours for the family
- understanding and eliminating access to fire-starting materials and other fire-related materials
- eliminating inappropriate modelling of fire-related behaviour
- understanding high risk situations and other triggers to fire involvement
- improving supervision and monitoring practices
- developing alternative responses to triggers
- understanding the consequences of fire involvement and developing an appropriate consequence plan
- gaining support from others and
- planning for the future and monitoring for changes that may signal increased risk.

What outcomes can be expected from the treatment component of TAPP-C?

Research examining the effectiveness of PMT programs for the parents of children with disruptive behaviour difficulties indicates that these strategies can lead to substantial improvements in the children's behaviour (Cunningham, Bremner & Boyle, 1995; Kazdin, Siegel & Bass, 1992; Webster-Stratton, Hollinsworth & Kolpacoff, 1989). CBT programs for children with disruptive behaviour problems show similarly effective results (Augimeri, Koegl & Goldberg, 2001; Kazdin, Bass, Siegel & Thomas, 1989; Kendall & Braswell, 1993; Larson & Lochman, 2002; Webster, Augimeri & Koegl, 2002).

These findings hold true both when the treatments are administered individually (that is, PMT only or CBT only) as well as when they are administered in combination (PMT + CBT) (Kazdin, Siegel & Bass, 1992). However, treatment that provides a combination of PMT and CBT is more effective than either alone (Kazdin, Siegel & Bass, 1992). Accordingly, it is advised that both the TAPP-C caregiver intervention module and the child intervention module be administered.

It is also clear from the research that using a collaborative model of intervention is associated with more positive treatment outcomes in families where children are experiencing behavioural difficulties than using models where the clients have no interactive input (Webster-Stratton & Hancock, 1998).

Preliminary evaluations of TAPP-C

Preliminary evaluations of the treatment component of TAPP-C are promising. Over four years, approximately 200 families have participated in the TAPP-C research project at the Centre for Addiction and Mental Health in Toronto, Ontario, Canada. These families received:

- comprehensive risk assessments
- an earlier version of the interventions in this manual
- fire-safety education from the fire department and
- in many cases, referral for other mental health services.

Follow-up evaluations conducted with these families one year after receiving the initial services suggest that TAPP-C is as effective as firesetting treatment programs currently described in the literature (e.g., Kolko, 2001). Similar to Kolko's findings, approximately three-quarters of TAPP-C parents report no further fire involvement by their children (MacKay & Henderson, 2002).

These results, taken together with evidence for the efficacy of PMT and CBT from the research literature, provide preliminary support for the

TAPP-C treatment component as a promising intervention for a clinically-referred sample of families with children or adolescents who have engaged in firesetting or other types of fire involvement.

Future research plans include conducting a randomized, controlled treatment study using this manual, to further examine the effectiveness of the TAPP-C treatment component.

Factors that may affect success or failure of TAPP-C treatment

On the basis of the evidence from studies of therapies with children who have behavioural problems, the success of TAPP-C is likely to be affected by the following:

- whether or not the caregiver and the child attend and complete all sessions
- the extent of client participation in the session and
- the completion of home practice exercises.

Similar to other treatment programs, the effectiveness of TAPP-C will undoubtedly be affected by:

- parent factors, such as mental health issues
- child factors, such as the severity of the firesetting behaviour and other psychopathology and
- therapist factors, such as extent of clinical experience.

For whom is the treatment component of TAPP-C appropriate?

TAPP-C has been developed as a targeted therapy to be used for both the caregivers of children and adolescents between the ages of two and 17 who have been involved in firesetting or other types of fire involvement and the children themselves.

For the purposes of this manual, *fire involvement* is defined as any unsanctioned or dangerous fire-related behaviour that has been threatened, planned or carried out. Fire involvement may include, but is not limited to:

- unsanctioned igniting of matches, lighters or other ignition sources and/or accelerants (“match and/or lighter play”)
- unsanctioned and/or exploratory igniting of paper, garbage, leaves or small objects (“fire play”)
- intentional igniting of objects, buildings, vehicles or persons (“firesetting” or “arson” where legal charges have been laid) and
- bomb-making.

Fire involvement may occur on one occasion only or frequently. It may be carried out by individuals or by a group of individuals. It may result from impulsivity, boredom, curiosity, attention-seeking, maliciousness or a pathological interest in fire.

The children and adolescents who are appropriate for TAPP-C may be living in family homes, foster homes, group homes or residential or custodial facilities. In each context, the appropriate participants include the child or adolescent, the primary caregiver of the child or adolescent, and any caregivers with whom the child or adolescent visits regularly; for example, a non-custodial parent. On some occasions, it may be appropriate to include other family members, but that is a clinical decision best made on a case-by-case basis.

This manual is likely to be most helpful for families with children between the ages of six and 12 years and the clinicians working with them. Although TAPP-C has been used with children from two- to 17-years-old, this manual focuses on describing most fully the interventions used with the typical firesetter; that is, a child between six and 12 years of age. For children who are younger or older, it will be necessary to modify the interventions somewhat. Some appropriate modifications have been described in the Special Issues section, p. 203.

The ideal and alternative formats of the TAPP-C treatment model

The model of TAPP-C service delivery that has been used throughout the follow-up evaluation study involves two clinicians working together concurrently to help the family. One clinician works primarily with the child, and the other works primarily with the caregiver (or parent).

As described in this manual, each session begins with a joint meeting of the two clinicians and both the child and the caregiver. During the joint meeting, home practice exercises are reviewed and any obstacles to progress are identified and addressed. Following this, the parent and child are seen separately by one clinician each in order to cover the content material and skill development exercises. Each session ends with another brief joint meeting in which the caregiver and the child share with each other what they have learned, and discuss the home practice exercises for the coming week.

Currently, this is the ideal format, yet it is recognized that some agencies may not be able to provide service in this way; for instance, it may be that there are resources for only one clinician per family. Accordingly, this manual has also been designed to permit joint sessions with the caregiver and the child, with one clinician. Or a single clinician may see the caregiver and the child separately on alternating weeks, or may work through all of the caregiver sessions, then all of the child sessions. We don't recommend that there be only sessions with the caregiver or only sessions with the child as the efficacy of these alternative models of TAPP-C service delivery have not yet been evaluated.

A group format may be possible for the caregiver sessions. At this point, however, group administration of the child or adolescent component of the therapy is not generally recommended. Some evidence in the literature on antisocial behaviour suggests that providing mental health services to antisocial youth in groups may yield no treatment effects whatsoever or even exacerbate youth symptomatology (Dishion, McCord & Poulin, 1999). Other evidence, however, indicates treatment models

using a multi-faceted approach, where groups for pre-adolescent children are one component, can be successful (Hrynkiw-Augimeri, Pepler & Goldberg, 1993; Bloomquist & Schnell, 2002; Earlscount Child and Family Centre, 2001a, 2001b).

Until further research determines under what circumstances group intervention with antisocial children and youth is successful, the prudent course of action is to treat children and adolescents individually, especially in the case of adolescents.

What training is necessary to use this manual?

This is a manual for mental health clinicians who treat children and adolescents who have behaviour problems, and their families.

The clinician who intends to use this manual should be familiar with the following fields:

- normative child development
- child psychopathology
- the theory and practice of parent management training (PMT) (Cunningham, Bremner & Boyle, 1995; Kazdin, Siegel & Bass, 1992; Webster-Stratton, Hollinsworth & Kolpacoff, 1989)
- child and adolescent cognitive behaviour therapy (CBT) (Augimeri, Koegl & Goldberg, 2001; Kazdin, Bass, Siegel & Thomas, 1989; Kendall & Braswell, 1993; Larson & Lochman, 2002; Webster, Augimeri & Koegl, 2002) and
- collaborative intervention approaches (Webster-Stratton & Hancock, 1998).

In addition to this more general experience in treating child behaviour problems and the issues surrounding it, clinicians should also be familiar with:

- the assessment and treatment of fire involvement by children and adolescents and
- the empirical literature on childhood firesetting (e.g., Gaynor, 1991; Kolko, 1996; Kolko, 2001).

Ideally, the treatment component of TAPP-C should be offered as part of the full TAPP-C program, which, in addition to the TAPP-C treatment component, includes a comprehensive risk assessment of the child and his or her family by mental health professionals, and a home fire-safety check and fire-safety education provided by fire service professionals. In addition to resources that are available in the literature, TAPP-C offers specialized training for mental health professionals in assessing and treating firesetting by children and adolescents. For more information about training opportunities, contact manual authors.

As well, the TAPP-C treatment component should be viewed as part of a continuum of mental health services that may benefit children and adolescents with disruptive behaviour problems and their families.

Additional care or treatment that may be offered to the children, adolescents and families involved with TAPP-C include the following:

- outpatient, day or residential mental health treatment for the child
- family therapy
- additional PMT
- additional child CBT and/or psychotherapy and/or
- medication.

How is this manual organized?

This manual is organized into four major parts:

- Part 1 explains the program.
- Part 2 includes caregiver modules.
- Part 3 includes child modules.
- Part 4 includes information about special issues that may affect the administration of the TAPP-C treatment component, such as dealing with adolescents or dealing with children living in group home and residential facilities.

Each caregiver and child module includes:

- background information for the clinician
- psychoeducational content about the session theme to convey to the client
- in-session practice exercises to do with the client to enhance skill learning
- home practice exercises for the client to enhance generalization and
- suggestions and opportunities to assist families to work collaboratively through joint review of session content and home practices exercises with children or adolescents and caregivers together.

Worksheets are provided for photocopying at the end of each session. Child worksheets can be put together and made into a Practice Book for the child, if desired.