

# Adolescent Sex Offender Treatment

## EVIDENCE BRIEF

There is international and NZ evidence that treatment for adolescents displaying harmful sexual behaviour reduces later offending, particularly when it is targeted at the specific needs of the adolescent, their family, and their social environment.

### OVERVIEW

- This brief covers adolescents (typically 12 to 17 years old) who sexually offend or engage in sexually abusive behaviours.
- International and New Zealand figures estimate that 15 – 17% of sexual offences are committed by adolescents.
- While research suggests that the large majority of these youth desist from sexual offending, adolescent sex offending is still a risk factor for sex offending in adulthood.<sup>1</sup>
- Similar to adult sexual offender treatment, adolescent treatment is typically cognitive behavioural and relapse-prevention (CBT-RP) focussed, often with “multisystemic” delivery (i.e., in a family/community setting).
- International evidence suggests that treatment can reduce sexual recidivism for treatment completers, with Multisystemic Therapy (MST) currently demonstrating the best evidence.
- In New Zealand, treatment is provided to adolescents (12 – 17 years old) by three community organisations based in Wellington, Christchurch, and Auckland, and a high-risk residential facility in Christchurch.
- Research on these New Zealand programmes have found some positive results with regards to reducing recidivism, however high dropout rates (i.e., 45 - 59%) and unmatched comparison groups make it difficult to draw firm conclusions.

- Research suggests treatment works best when it recognises strengths, targets the needs of the adolescent, and includes caregivers, family, peers, and schools.
- Challenges in researching this population include; high dropout rates, inequivalent comparison groups, unreported sexual offences and low base rates for sexual recidivism influencing effect sizes.

### EVIDENCE BRIEF SUMMARY

Evidence rating:	Promising for programme completers.
Unit cost:	Community = average of \$23,377 per person. Residential = average \$340,120 per person for 1 year placement.
Effect size (number needed to treat):	For every 12-17 offenders completing treatment, one less will sexually reoffend.
Current spend:	\$6.95 million (Oranga Tamariki).
Unmet demand:	Unknown.

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## WHAT ARE ADOLESCENT SEX OFFENDER TREATMENTS?

Treatment for adolescent sexual offenders is often adapted from adult programmes. For example, cognitive-behavioural therapy techniques challenge thoughts/beliefs which support offending, and encourage development of cognitive and interpersonal skills. In addition, relapse prevention (RP) identifies risky situations, and develops a “safety plan” to help the individual avoid or manage these.

It is crucial that programmes are age-adapted for adolescents (e.g., less sexual reconditioning procedures and more family involvement), as research suggests that the most successful interventions for youth include high levels of caregiver involvement and are individualised to match the dynamic strengths and needs of each youth.<sup>ii</sup>

In terms of treatment setting, the adolescent may receive individual and/or group therapy, Wilderness Therapy (WT), family therapy in the home, or a combination of these, often termed Multisystemic Therapy. MST consists of a core set of principles, but is not a highly-specified type of programme per se.<sup>iii</sup>

A version of MST has been developed for youth displaying “problem sexual behaviours” (MST-PSB).<sup>iv</sup> This approach includes CBT techniques with multisystemic delivery (i.e., at home with caregivers and other family members, peer group and school involvement). Therefore, it is important to recognise that these treatment types are *not mutually exclusive*, they are often delivered in combination dependent on the philosophy of and resources available to treatment providers.

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## DOES ADOLESCENT SEX OFFENDER TREATMENT REDUCE CRIME?

### International evidence

Around 17% of recorded sexual offences in the US and 15% in New Zealand are perpetrated by offenders under 18 years old.<sup>v</sup> Recent US research indicates that out of all adolescent sex offenders identified by the justice system, 2.8% will reoffend sexually within 5 years and 30% will reoffend generally.<sup>vi</sup> Although New Zealand research has found higher overall rates for sexual (5.7%) and general (45%) recidivism with adolescent sex offenders, these rates may have declined more recently in line with declines found in the US research.<sup>vii</sup>

International reviews and meta-analyses of adolescent’s sex offenders’ treatment have found overall positive effects on sexual recidivism. While the cumulative evidence supports treatment overall, there are still some significant methodological weaknesses (e.g., inadequate comparison groups), and certain approaches appear more effective than others.<sup>viii</sup>

A recent (2017) review of evidence-based treatment for youths who engage in sexually abusive behaviours offers an up to date picture of the field, and classifies different types of treatment in terms of their evidence base. It is worth noting that of 1,445 studies identified from key words in their literature search, only ten met their criteria to serve as evidence (i.e., a published, peer reviewed study that evaluated the effects of a psychosocial treatment versus a control group targeting youths who engaged in illegal sexual behaviours). Further, only five of these ten articles were published in the last ten years. This highlights the lack of quality research in this area, in particular few Randomised Controlled Trials (RCTs), which are necessary to increase certainty that treatment is effective.<sup>ix</sup>

These authors concluded that CBT approaches are widely used with this group despite a lack of empirical support, CBT-RP was classified as “experimental”. Behaviour Management through Adventure (a form of WT) was also found to be “experimental”. In contrast, MST-PSB had the most empirical support, and was found to be “probably efficacious”. Notably, half of the treatment programmes reviewed also demonstrated significant reductions in non-sexual offending.<sup>x</sup>

Two meta-analyses (see *Table 1*) investigating the relationship between treatment and recidivism with this population exist.<sup>xi</sup>

The first meta-analysis found a significant difference in sexual recidivism rates for treated (7.37%), and untreated (18.93%) adolescent sex offenders.<sup>xii</sup> This positive treatment effect was consistent across all nine studies included in the meta-analysis, suggesting that all types of treatment reduced recidivism. However, the five CBT studies varied in the quality of assignment to treatment and measurement of recidivism, the only two RCTs were for MST. In addition, most treatments included some elements of MST such as individual, group, and family therapy. The treatment of dropouts from each study were either unknown or excluded from analyses leading the authors to suggest that the results be interpreted with caution.<sup>xiii</sup>

The second meta-analysis also found a significant reduction in sexual recidivism rates for treated adolescent sex offenders across the three studies that looked at recidivism.<sup>xiv</sup> They further found a significant treatment effect across 10 studies that looked at either sexual recidivism, self-reported sexual attitudes or levels of deviant sexual arousal. However, 80% of the studies in this meta-analysis did not utilise a control group. Of the different treatment types CBT approaches were found to be the most effective, but in these three studies recidivism was not the outcome measure. Three of the four largest effect sizes used CBT or MST, and these

two types of treatment were judged the most promising.<sup>xv</sup>

In summary, international meta-analyses and reviews have found positive results for the use of adolescent sex offender treatment in reducing reoffending for those who completed treatment, with MST-PSB currently displaying the most robust evidence in its support. This may be due to the use of RCTs to evaluate its effectiveness in reducing recidivism. It seems unlikely that CBT approaches are ineffective, but rather that they are more likely to be effective when they are used in a programme that adheres to MST principles, and that targets “problem sexual behaviours”.

## New Zealand evidence

New Zealand has evaluated several adolescent sex offender treatment programmes with some positive results, however the New Zealand research suffers from significant methodological weaknesses and caution is advised when interpreting the results.

In 2003 (published in 2007) Child Youth and Family (CYF) commissioned an evaluation of the effectiveness of three community-based treatment programmes. The treatment provided by these programmes was tailored to the individual’s needs, and includes CBT-RP techniques within individual, group, and family therapy, as well as a commitment to being culturally responsive and liaising with relevant external agencies. They also include aspects of WT and the locally developed “Good Way Model”.<sup>xvi</sup> The outcomes measured include reoffending, psychological health, and cost-effectiveness.

In terms of sexual reoffending, youth who completed these programmes had a 3% rate of reoffending compared with a 10% rate for treatment drop-outs and a 6% rate for no treatment comparisons. However, only the difference between treatment completers and

treatment dropouts was statistically significant.<sup>xvii</sup> The 3% sexual reoffence rate for treatment completers compares favourably with international sexual reoffence rates for treated adolescents (typically around 10%).<sup>xviii</sup> The evaluation also found significantly higher general reoffence rates for treatment dropouts (62%) compared with treatment completers (38%) and no treatment comparisons (41%), but no significant difference between completers and no treatment comparisons. Notably, treatment completers were significantly less likely to reoffend violently (12%) compared with both treatment dropouts (31%) and no treatment comparisons (26%).<sup>xix</sup>

While some of these results are promising, the high dropout rate (45%) and the use of dropouts and adolescents who were referred but not treated as the comparison groups is problematic. Specifically, there could be important pre-treatment differences between those offered treatment versus not (e.g., risk level, motivation), and those who complete versus drop out (e.g., compliance, family support). Dropout rates were particularly high for Māori (55%) and Pasifika participants (63%) in comparison with Europeans (36%). Dropouts occurred for various reasons including client refusal/withdrawal, removal due to poor attendance/behaviour, cessation of agency funding and clients relocating away from service areas.<sup>xx</sup> Subsequent research on one of these treatment programmes found that the strongest predictors of dropout pre-treatment were school expulsion and prior experiences of emotional abuse when controlling for an array of other predictors including age and ethnicity.<sup>xxi</sup>

Between 2001 and 2006, CYF commissioned an evaluation of *Te Poutama Ārahi Rangatahi* secure facility in Christchurch. Te Poutama Ārahi Rangatahi is a residential treatment centre for high-risk, sexually abusive male adolescents who are unsuited for community treatment. The evaluation found that only 3 of 41 participants (7%) who started the treatment reoffended

sexually over an average of 3.5 years, and 2 of those reoffenders had not completed the programme. However, 31 of these participants (75%) were convicted of a non-sexual offence with an average of 19 post-treatment convictions. This evaluation also suffered from a high dropout rate (59%) and lack of a suitable comparison group, making it difficult to identify any treatment effects.<sup>xxii</sup>

In summary, the New Zealand evidence suggests that treatment of adolescent sexual offenders has the potential to reduce reoffending. However, high dropout rates and unmatched comparison groups make it difficult to draw firm conclusions. Although both these evaluations are over 10 years old and both these programmes are still operating in New Zealand there have been no recent evaluations of these programmes that are publicly available. There is still a need to evaluate, understand and mitigate high treatment dropout rates in New Zealand programmes to increase the quality of the programmes and subsequent evaluations.

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## WHEN IS ADOLESCENT SEX OFFENDER TREATMENT MOST EFFECTIVE?

Research has demonstrated that the most effective treatment programmes with adolescent sex offenders are care-giver inclusive, strength-based, and matched to individual's risk factors and needs.<sup>xxiii</sup>

### Specific needs and caregiver behaviour

It has been suggested that adolescent sex offenders need specifically targeted programmes. However, the evidence concerning the differences between adolescent sex offenders and other types of adolescent offenders is mixed concerning likelihood of persistence, specific risk-related needs, and criminal versatility. On the one hand, adolescent sexual offenders have been described as

different to their antisocial peers, and on the other, they seem to have several risk factors in common.<sup>xxiv</sup> In addition, adolescent sexual offenders typically demonstrate higher rates of general rather than sexual recidivism.

This suggests that the same type of intervention may be useful with adolescents generally, but that content specific to sexual offenders needs to be incorporated also.

MST-PSB is one example of a holistic programme adapted specifically for youth displaying sexual behaviour problems. Treatment targets include: individual skills and cognitive restructuring, family safety planning and communication skills, peer affiliations, and communication with schools to encourage academic achievement. Emphasis is placed on instilling skills and strategies within caregivers that can address future problem behaviours for adolescents.<sup>xxv</sup>

It is thought that the positive results of MST-PSB are due to its broad focus on well-established ecological risk and protective factors that are specifically linked with sexually abusive behaviours.<sup>xxvi</sup>

In addition, it has been found that the relationship between treatment and reduced reoffending is mediated by caregiver behaviour such as follow-through with discipline, and concern about peer associations. This supports the MST principle that positive caregiver behaviours are key in reducing problem behaviour in adolescents.<sup>xxvii</sup>

### **Practitioner expertise, engagement, and responsivity**

It has also been suggested that due to the complex and nuanced nature of programmes such as MST-PSB, it is important that therapists and supervisors are adequately trained in these methods,<sup>xxviii</sup> and that interventions are

developed and evaluated within specific settings.

For example, programmes may need modification for the range of adolescents participating (e.g., age, gender, culture, offence characteristics). Just because a programme works well for a large number of adolescents does not mean that it (alone) will meet the needs of each individual within that population.<sup>xxix</sup>

The evaluation of New Zealand programmes highlighted the need for integration of cultural components and models within treatment, and to better liaise with the wider Māori community in supporting this population. In addition, it was observed that more could be done to be responsive to the cultural needs of Pacific youth who sexually offend.<sup>xxx</sup>

Responsivity issues are particularly important as youth who drop out of treatment typically reoffend at higher rates than those who do not begin treatment at all.

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## **WHAT OTHER BENEFITS DOES ADOLESCENT SEX OFFENDER TREATMENT HAVE?**

### **Health and behavioural outcomes**

Meta-analyses investigating the use of MST in general have found that youth and family treated with MST functioned better than 70% of those offered alternative treatment,<sup>xxxi</sup> as well as showing significant reductions in antisocial behaviour.<sup>xxxii</sup>

New Zealand research found a general pattern of reduction in behavioural and psychological problems, measured by psychometric tools.<sup>xxxiii</sup>

Additional research in New Zealand has looked specifically at Wilderness Therapy (WT) within community based programmes, and has found positive changes in various outcomes including; social skills and relationships, intimacy and

sexuality, view of self, aiding disclosure, victim empathy, distorted thinking, safety plans, and coping with high risk situations.<sup>xxxiv</sup>

Finally, while sexual recidivism is most often the outcome of interest in this population, studies often report that treatment can reduce reoffending generally, although to a smaller degree. This suggests that alongside targeting sexual offending, these programmes may be promoting skills and attitudes that contribute to less antisocial behaviour overall.

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## COST-EFFECTIVENESS

Economic benefit estimates in the US for evidence-based adolescent sex offender treatment are \$1.24 (CBT-RP and MST-PSB)<sup>xxxv</sup> and \$48.81 (MST-PSB) per dollar spent, over 8.9 years follow-up.<sup>xxxvi</sup> This indicates that adolescent treatment may produce economic benefits in the future, for example in reduced imprisonment and preventing numerous costs associated with victimisation (including the possibility of future perpetration of abuse).

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## CURRENT INVESTMENT IN NEW ZEALAND

### Department of Corrections

The Department of Corrections does not directly offer treatment to youth who have offended sexually but will refer 17-year-old adolescents for individual treatment. Oranga Tamariki is responsible for youth aged 16 years and under, however community adolescent treatment programmes funded by Oranga Tamariki include 17 year olds.

### Oranga Tamariki

Oranga Tamariki currently spends approximately 6.95 million per year on residential and community treatment programmes for both adolescents (12 to 17 years old) and children

(under 12 years old) who display sexually abusive behaviours.

Three community based programmes hold contracts with Oranga Tamariki, and each of these have at least one smaller satellite service in nearby regions.

- WellStop, Wellington
- SAFE Network, Auckland
- STOP, Christchurch

Oranga Tamariki spends approximately 4.2 million (\$4,232,369) on these community programmes annually, delivering 133 assessments and 164 treatments in the last year of service with an average cost of \$23,377 per person for assessment and treatment.

Te Poutama Ārahi Rangatahi is a secure residential facility in Christchurch which houses and provides treatment to a smaller number of adolescents (12 to 17 years old) who are at a high risk of sexually abusive behaviour. Te Poutama is a full residential service including full care and educational services with treatment for harmful sexual behaviour comprising only one component of the service. Oranga Tamariki spends approximately 2.7 million (\$2,720,964) on Te Poutama annually. The facility holds 8 placements at any one time, with an average cost of \$340,120 per person for a one year placement.

Both the community and residential programmes in New Zealand are based on CBT treatment models. As previously mentioned, international research on MST-PSB has demonstrated the most robust evidence-based treatment available.<sup>xxxvii</sup> Although the New Zealand community programmes offer family sessions on a case by case basis, to fit within the MST-PSB model they would need mandatory family and caregiver involvement throughout treatment, and the involvement of wider community organisations such as schools.

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## EVIDENCE RATING AND RECOMMENDATIONS

Each Evidence Brief provides an evidence rating between Harmful and Strong.

Harmful	Robust evidence that intervention increases crime
Poor	Robust evidence that intervention tends to have no effect
Inconclusive	Conflicting evidence that intervention can reduce crime
Fair	Some evidence that intervention can reduce crime
<b>Promising</b>	<b>Robust international <i>or</i> local evidence that intervention tends to reduce crime</b>
Strong	Robust international <i>and</i> local evidence that intervention tends to reduce crime

According to the standard criteria for all Evidence Briefs<sup>1</sup>, the appropriate evidence rating for Adolescent Sex Offender Treatment is Promising for programme completers.

As per the standard definitions of evidence strength outlined in our methodology, the interpretation of this evidence rating is that:

- Robust international or local evidence that interventions tend to reduce crime.
- Investment may well generate a return if implemented well.
- Further evaluation desirable to confirm intervention is delivering a positive return and to support fine-tuning of the intervention design.
- Multisystemic interventions which target the individual, their caregivers, and their wider support network within their environment are most promising.

This evidence rating is based mainly on the international evidence with the caveat that treatment dropouts have not been adequately

accounted for in meta-analysis. High-quality evaluations of the New Zealand treatment programmes that support treatment effectiveness would be needed to raise the rating to strong.

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## FIND OUT MORE

### Go to the website

[www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/](http://www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/)

### Email

[whatworks@justice.govt.nz](mailto:whatworks@justice.govt.nz)

### Recommended reading

Fortune, C.-A. (2007). Not just 'old men in raincoats': effectiveness of specialised community treatment programmes for sexually abusive children and youth in New Zealand. Doctor of Philosophy thesis. University of Auckland, Auckland, New Zealand.

Kingi, V. & Robertson, J. (2007). Evaluation of the Te Poutama Ārahi Rangatahi residential treatment programme for adolescent males. Ministry of Social Development (CYF) Final Report prepared by Crime and Justice Research Centre, Victoria University of Wellington.

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<sup>1</sup> Available at [www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/](http://www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/)

## Citations

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- i Lussier & Blokland 2014
- ii Dopp et al. 2017
- iii Dopp et al. 2015, 2017
- iv Dopp et al 2017
- v Federal Bureau of Investigation 2015, NZ Police 2017
- vi Caldwell 2016
- vii Caldwell 2016, Fortune 2007
- viii Dopp et al. 2015, 2017, Worling et al 2010
- ix Dopp et al. 2017
- x Dopp et al 2017
- xi Reitzel & Carbonell 2006, Walker et al. 2004
- xii Reitzel & Carbonell 2006
- xiii Reitzel & Carbonell 2006
- xiv Walker et al. 2004
- xv Walker et al. 2004
- xvi Lambie 2007
- xvii Fortune 2007
- xviii Walker et al. 2004
- xix Fortune 2007
- xx Fortune 2007
- xxi Tolcher 2017
- xxii Kingi & Robertson 2007
- xxiii Dopp et al. 2017
- xxiv Seto & Lumiere, 2010, Worling, 2013
- xxv Dopp et al. 2017
- xxvi Dopp et al. 2017
- xxvii Dopp et al. 2017
- xxviii Dopp et al. 2017
- xxix Dopp et al. 2017
- xxx Lambie 2007
- xxxi Curtis et al. 2004
- xxxii Butler et al. 2011
- xxxiii Fortune 2007, Kingi & Robertson 2007
- xxxiv Lambie et al. 2000, Somervell & Lambie 2009
- xxxv Dopp et al. 2017
- xxxvi Borduin & Dopp 2015
- xxxvii Dopp et al. 2017

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**TABLE 1: SUMMARY OF EFFECT SIZES FROM META-ANALYSES**

Meta-analysis	Treatment type/population	Outcome measure	Reported average effect size	Number of estimates meta-analysis based on	Percentage point reduction in offending (assuming 50% untreated recidivism)	Number needed to treat (assuming 50% untreated recidivism)
Reitzel & Carbonell, 2006	Various Treatment Adolescents <20 (male & female)	Sexual recidivism	OR=0.43*	9	0.08	12
Walker et al., 2004	Various Treatment Adolescents (male)	Sexual recidivism Overall: includes sexual recidivism, self-report, & arousal	R=0.26* R=0.37*	3 10	0.06 0.07	17 13

\* Statistically significant at a 95% threshold

OR=Odds ratio

R = Average weighted effect size (less than 1 indicates less recidivism)