



NEW ZEALAND  
**FIRE  
SERVICE  
COMMISSION**  
Whakararanga Iwi

# Fire Research Report

## *Get Out! Stay Out!* Evaluation

### SHORE and Whariki Research Centre

April 2014

*Get Out! Stay Out!* is a fire safety programme for preschool children aged from two to five years old that focuses on surviving a fire in the home. This research evaluated the programme, using a process evaluation which focused on determining the quality of the *Get Out! Stay Out!* programme and an outcome evaluation which assessed the impacts that resulted from it.

This evaluation was informed by programme theory-driven and valuing approaches to evaluation. To enable evaluative judgements to be made about *Get Out! Stay Out!*'s quality and success in achieving outcomes, evaluation criteria and rubrics expressing performance standards for the criteria were utilised. Data for the evaluation were collected through interviews, surveys and a review of programme documentation and resources.

Overall *Get Out! Stay Out!* has performed at a very good to excellent standard in relation to the evaluation questions. The evaluation was conducted between May 2013 and April 2014.

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## *Get Out! Stay Out!* Evaluation

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## 1.0 Executive summary

### Get Out! Stay Out! Programme

*Get Out! Stay Out!* is a fire safety programme for preschool children aged from two to five years old that focuses on surviving a fire in the home.

It precedes the New Zealand Fire Service's (NZFS) *Get Firewise*, Year 1 and 2 programme used in primary schools.

### Evaluation of Get Out! Stay Out!

The NZFS is the commissioner of this evaluation. The process evaluation focused on determining the quality of the *Get Out! Stay Out!* programme and the outcome evaluation assessed the impacts that resulted from it. This evaluation was informed by programme theory-driven and valuing approaches to evaluation. To enable evaluative judgements to be made about *Get Out! Stay Out!*'s quality and success in achieving outcomes, evaluation criteria and rubrics expressing performance standards for the criteria were utilised. Data for the evaluation were collected through: (a) interviews with preschool teachers; (b) a parent survey; (c) an interview with a NZFS representative; and (d) a review of programme documentation and resources. The evaluation was conducted between May 2013 and April 2014.

### Evaluation results

The results of the evaluation are reported as answers to the four evaluation questions

#### Process evaluation

#### 1. What is the quality of the content, design and delivery of the *Get Out! Stay Out!* fire safety programme? (Process evaluation)

For this question performance was rated as **excellent**. Data from teachers indicates that all of the evaluation criteria were extremely well met.

#### 2. What is the quality of the parent resource?

For this question performance was rated as **very good**. However, this rating needs to be treated with caution due to the low response rate from parents. On the basis of the available evidence it appears that the resource has been well-received and utilised.

### 3. What is the quality of the interface with the fire service?

For this question performance was rated as **excellent**. Data from teachers indicated this is an extremely valuable component of programme implementation which has also allowed for engagement of parents.

#### Outcome evaluation

### 4. How successfully have the outcomes been achieved? (Outcome evaluation) – How well have *Get Out! Stay Out!* activities impacted on the target audience of preschool children and their parent(s)/caregiver(s)?

For this question performance falls between **excellent** and **very good**. Data from teachers indicates that children clearly understand the key messages and actions to take if there is a fire and this is an excellent outcome. The parent survey data is limited and shows some variation across outcomes. The strongest outcomes for home-based fire safety were installation of fire alarms and knowledge of the *Get Out! Stay Out!* message.

#### Summary of results

Overall *Get Out! Stay Out!* has performed at a very good to excellent standard in relation to the evaluation questions.

*Get Out! Stay Out!* is:

- Characterised by strong alignment with best practice fire safety programmes targeting young children
- Well planned and implemented
- Conveying the *Get Out! Stay Out!* message to children and their families
- Engaging children in the programme
- Contributing to fire safety knowledge for children
- Contributing to the development of a fire conscious family
- Presenting the fire fighter as a helper and trusted community representative

#### Ideas for the future

While this evaluation has identified *Get Out! Stay Out!* is performing to a very good to excellent level, there are some issues and areas for development that could be usefully considered in the ongoing delivery of fire safety programmes targeting preschool children and their families.

#### Additional materials and formats

Teachers suggested that the programme could be extended to include an animated DVD of the story, 'real' pictures in the big story book, having someone narrate the story on a DVD,



and having a DVD of a local fire station. It was also suggested that there could be additional themes focusing on fire safety on occasions such as Guy Fawkes. Parents and teachers suggested that stickers would be a worthwhile addition to the resources, particularly for developing the escape plan.

#### Website

Teachers need to be made aware of the NZFS website and what it can offer them to enhance their teaching of the programme.

#### Materials for the very young children

Teachers considered the *Get Out! Stay Out!* resources as most appropriate for three to five year old children. They suggested some 'real beginning' resources for younger children such as a cartoon video clip or learning song.

#### Translation of *Get Out! Stay Out!* into different languages

Many centres were multi-cultural, with some having up to 16 ethnicities. It was suggested that translations into other languages would be an improvement, particularly for the take home information for families.

## 2.0 Introduction

*Get Out! Stay Out!* is a fire safety programme that focuses on surviving a fire in the home. It is delivered by the New Zealand Fire Service (NZFS).

The SHORE and Whariki Research Centre was contracted to provide an evaluation of *Get Out! Stay Out!* Dr Pauline Dickinson, Dr Jeffery Adams, Dr Angela Moewaka Barnes and Dr Lanuola Asiasiga were the researchers on the evaluation.

This is a process and outcome evaluation. The process evaluation is focused on determining the quality of *Get Out! Stay Out!* and the outcome evaluation assessed the impacts that resulted from it.

The evaluation was undertaken from May 2013 to April 2014.

This document reports on the approach, activities and methods, and results of this evaluation.

### 3.0 Background

Children are the group most at-risk of dying or being badly burned in a fire. They are the most vulnerable because they do not know how to escape a fire safely. When a fire strikes, it spreads extremely rapidly, typically leaving less than three minutes to get out of a house. Children often perish in fires because they hide in cupboards and under beds to escape it.

The New Zealand Fire Service is often called upon by preschool educators to either teach children about fire safety or provide fire safety information for young children. The *Get Out! Stay Out!* resource was developed in partnership with the New Zealand Fire Service and the Hamilton Branch of the Ministry of Education and through consultation with a range of pre-school educators. It is designed for pre-school educators to deliver independently of the Fire Service.

*Get Out! Stay Out!* is for preschool children aged from two to five years old. It precedes the New Zealand Fire Service's *Get Firewise*, Year 1 and 2 programme which is now run as *Get Firewise!* and is currently used in primary schools. The focus of *Get Out! Stay Out!* is on surviving fire in the home setting. The content and learning outcomes of the programme are designed to meet the range of learning abilities across the two to five year old age group. Children learn that fire is hot and fast, what smoke alarms and extinguishers are, and what they sound like, the importance of shouting "fire, fire, fire" when there is a fire to raise the alarm to others in the house, the role of the fire fighter and matches and lighters safety. They also learn that in a fire, they should get out and stay out and meet family/whanau at a safe meeting place. Principles of the Te Whariki Early Childhood Curriculum are integrated into the programme. In each of the curriculum strands, learning outcomes have been developed around a number of Te Whairiki goals. The additional take home material encourages parental/caregiver involvement and responsibility in home fire safety. It emphasises the importance of children learning in the home environment in addition to learning through early childhood education providers.

## 4.0 Literature Review

There is limited published evidence relating to the effectiveness of fire safety initiatives targeting preschool children, the age at which children are most at risk. A study conducted by Schaenman and colleagues (1990) described 77 community or school-based fire safety programmes, but only six of these involved children of primary school age and none included children younger than five years old.

Fire safety activities involving children commonly involve partnerships with fire departments. Programmes involving fire services have been found to be successful in preventing fires and deaths, improving smoke alarm ownership and improving children's fire safety knowledge (Ta, Frattaroli, Bergen, & Gielen, 2006).

### *Preschool fire safety education*

Until relatively recently it was thought that preschool age children were too young to be able to learn about fire and fire safety behaviours and their safety was considered to be totally dependent upon parents and caregivers providing appropriate environments and taking appropriate actions in emergency situations (National Fire Academy, 2003). In 1979 a landmark study was conducted by Peel and Schauble (1979) for Children's Television Workshop – the producers of Sesame Street – to identify how preschool children would react to televised fire safety messages. The findings from this research indicated that children could learn fire safety messages thus radically changing the feelings of professionals about safety education for preschool children. The fire safety messages have been applied to both televised and non-televised safety programmes for preschool children (National Fire Academy, 2003). The earlier a child is taught fire safety, the less likely the child will be to react in the wrong way when confronted with an emergency (Smalley, 1983). Common topics presented by different fire services include lessons on stop, drop and roll, dangers of lighters/matches, proper use of emergency phone numbers, the importance of smoke detectors and home escape plans (Lesniak, 2003).

Fire safety lessons for preschool children need to be interactive and seeing and doing are important components. Lessons should be tailored to the developmental level of the child and are best focused on helping children and their families learn strategies for staying safe (Sharp, Blaakman, Cole, & Cole, 2005). In addition to classroom education for young children Kourofsky and Cole (2010) emphasised the need for fire safety education to reach the adults who care for children. Teachers sent home parent/child activities focused on the importance of smoke alarms and on checking their function every six months, keeping matches and lighters out of children's sight and reach and having and practicing a plan for exiting the home in case of fire. These authors also emphasised the need for fire safety

education to be revisited several times a year as without repetition young children and their parents tend to forget key details.

Children need opportunities to practice the desired behaviour and need to be shown the appropriate behaviour rather than what is inappropriate or unsafe (Gamache, 2003; Kirtley, 2003). Threats and warnings about the potential danger of fire such as yelling “don’t do that!” or trying to scare them into rule compliance by exposing them to burns victims should be avoided. Such approaches usually result in frightened, anxious children and are unlikely to catalyse sustained behaviour change (Sharp, et al., 2005). Preschool children have an undeveloped sense of time and they may not be able to understand the relationships of one thing to another, sequence of events and the concept of cause and effect as it relates to fire. They are also less likely to be able to consider more than one alternative and be able to make the best choice (Peel & Schauble, 1979). These aspects need to be taken into consideration when developing fire safety programmes targeting preschool children.

### *Fire safety programmes for young children*

Five preschool fire safety programmes and one programme targeting five to six year olds were identified in the literature. These programmes have usually been developed and facilitated by fire services in partnership with early childhood educators.

#### *Learn Not to Burn (Gamache & Porth, 2001)*

The *Learn Not to Burn* (LNTB) programme was developed by the National Fire Protection Association: The authority on fire, electrical and building safety (NFPA) in the United States as part of a multidisciplinary approach to reducing fire deaths and injuries among young children. The approach includes legislative and engineering methods, such as those advocating the development and adoption of child-resistant lighters, and educational programmes that teach parents/caregivers to keep matches and lighters out of reach of children. LNTB emphasises eight key behaviours:

- Stay away from hot things that can burn
- Tell a grown up when you find matches and lighters
- Stop, drop and roll if your clothes catch on fire
- Cool a burn
- Crawl low under smoke
- Know the sound of a smoke alarm
- Practice and escape plan
- Recognise the fire fighter as a helper

The LNTB programme teaches children what to do rather than scaring them. The activities are participatory, short and repeated and the whole family is involved to encourage parents to know what their children are learning. Training is offered to caregivers of young children (Gamache & Porth, 2001).

*Play Safe! Be Safe!* (Fireproof Children Inc and the BIC Corporation, 1994)

The *Play Safe! Be Safe!* programme developed by Fireproof Children Incorporated and the BIC Corporation in the United States teaches similar behaviours and uses similar educational philosophies as those found in the LNTB programme. It includes a fire safety video that introduces the “friendly fire fighter” acting in different situations (Gamache, 2003). Children are taught three fire safety behaviours (go to the fire fighter, stop, drop and roll; and crawl low under smoke) and one fire prevention behaviour (if you find matches or lighters, go tell a grown up).

*Kid Safe Programme* (Hansen, 1990)

The *Kid Safe* programme was developed by the Oklahoma City Fire Department. *Kid Safe* is a 30 hour programme with daily 20 minute sessions covering nine lessons presented over an 18 week period. Separate lessons teach children about:

- hot and cold items
- the use of matches and lighter
- the proper procedure if clothing catches on fire
- the difference between good fires and bad fires
- the importance of smoke detectors
- safe departure from a burning house
- how to cool burns
- the role of the fire fighter as a community helper.

The programme uses cognitive and behavioural aspects of fire safety. Cognitive aspects include situations to avoid, things not to play with etc. Behavioural techniques (e.g., modelling, role playing and rehearsal during simulated emergency situations) instruct children in specific behaviour sequences such as when there is smoke, “crawl low”. Another component of the programme involves having parents participate in home enrichment activities such as helping their child draw a home escape plan.

*Project L.I.F.E. – Local involvement in Fire Education* (Pan Educational Institute, 1986)

*Project L.I.F.E.* developed by the Pan Educational Institute and implemented in the City of Oklahoma, USA emphasises learning by sensory experience and the programme contains simple positive messages for children to be alert to fire and burn dangers, to be cautious

and to behave appropriately when threatened by fire, smoke or burn sources (Williams, Sowers, & Blaine, 1986).

*The Great Escape: an interactive computer game to improve young children's fire safety knowledge* (Morrongiello, Schwebel, Bell, Stewart, & Davis, 2012)

*The Great Escape* is an interactive computer game developed and distributed to parents on CD so that children (3.5-6 years) could play the game on their home computers. The game was designed so that children could play it alone or with minimal adult supervision. The game shows children with a number of common home-fire scenarios presented by fire fighters including a character modelling "best practices" for handling four scenarios (lighter and basic fire knowledge, home escape routes, what to do if your clothes catch on fire, and how to exit your bedroom safely if a fire is outside the room).

*Be Firewise – a New Zealand fire safety programme for year one and two students*

Although not targeting pre-schoolers, the *Be Firewise*, now called *Get Firewise*, level one and two fire safety education programme produced by the New Zealand Fire Service (NZFS) is similar to *Get Out! Stay Out!* The programme is taught by teachers and aims to teach Year One and Two children fire safety messages. Its delivery is supported by local fire fighters through school visits to reinforce messages. It is believed that by exposing children to fire safety messages at school and doing homework the messages will be transferred to families, making parents a secondary target group (Ogier, 2008).

### *Effectiveness of preschool fire safety programmes*

The fire safety programmes included in this review demonstrated that the knowledge of preschool children increased (Gamache & Porth, 2001; McConnell, Leeming, & Dwyer, 1996; Staberg, 1992; Walker, 2004). A significant decline in youth fire instances was noted post-implementation of the LNTB programme (Gamache & Porth, 2001). It is apparent that young children can be equipped with the knowledge and skills necessary for fire prevention and survival through the use of developmentally appropriate materials and developmentally and educationally sound methods for teaching children (Walker, 2004).'

An evaluation of the *Kid Safe* programme conducted by McConnell and colleagues (1996) in the United States involved 12 child care centres divided into two groups with one group assigned to the experimental condition and the other a wait-listed control group. Findings indicated that children exposed to the programme demonstrated a greater increase in fire-safety knowledge from pre-test to post-test than children in the comparison group. Interestingly what emerged from this evaluation was that knowledge changes were greatest among three year olds. What was not demonstrated, however, is whether such knowledge change leads to changes in behaviour.

As a result of the *Kid Safe* evaluation McConnell and colleagues (1996) raised some concerns regarding the retention of fire safety knowledge by young children and recommended that periodic retraining might be necessary. They also questioned whether the required knowledge and skills could be translated into the appropriate action during an emergency or if the children could make appropriate choices. They concluded that “the findings demonstrate that such programmes have definite promise for increasing the probability of a child living through a home fire emergency or avoiding one altogether” (McConnell et al., 1996, p. 223).

Evaluation of the *Be Firewise* programme (Ogier, 2008) found that the majority of children demonstrating a sophisticated understanding of fire safety had been taught *Be Firewise* whereas children not taught *Be Firewise* had a basic understanding. Children who were not taught *Be Firewise* understood that fire is dangerous but were unaware that fire produces smoke, that smoke is dangerous, or what the appropriate action is for escaping a room filling with smoke. Children who had been taught *Be Firewise* knew that fire produces smoke and that to escape a room filling with smoke they need to Get Down, Get Low, Get Out which is a key *Be Firewise* message.

The effectiveness of computer games as methods for teaching school-aged children affected by alcohol (i.e., foetal alcohol syndrome) about fire safety was evaluated by Coles and colleagues (2007). Preschool children play games repeatedly and games can be implemented in school and home settings with minimal adult supervision. Results suggested that learning persisted and could be demonstrated one week after the intervention.

A recent study (Morrongiello, et al., 2012) evaluated the effectiveness of a computer game – the *Great Escape* – that aimed to improve knowledge of fire safety and behaviours among three to six year olds. Positive gains were obtained with an average of 45 minutes playing time. The game enhanced knowledge in four areas – lighters and basic fire knowledge, home escape, clothes on fire and exiting your bedroom in a house fire.

Although there are only a few studies completed the evidence suggests that preschool children can be taught fire safety skills. Lessons need to be developmentally appropriate, involve repetition and be revisited several times a year to ensure knowledge is retained. More recent studies investigating the use of computer games show promise in providing children with simulated environments where they can practise skills.



## 5.0 The Evaluation

### 5.1 Aim

The aim of the evaluation was to assess the effectiveness of the *Get Out! Stay Out!* fire safety programme for preschool aged children in mainstream education institutions. The focus of the programme is surviving a fire in the home.

### 5.2 Objectives

This evaluation has two broad objectives:

- To assess the impact of the campaign's activities on the target audience of pre-school children and their parent (s)/ caregiver (s).
- To assess the quality of the *Get Out! Stay Out!* programme.

### 5.3 Ethical approval

A low risk notification was granted by the Massey University Human Ethics Committee and the evaluation approach and methodology are consistent with appropriate ethical standards.

### 5.4 Evaluation approach and design

The evaluation utilised a programme theory-based design (Donaldson, 2007). A representation of the intervention design in the form of a programme logic model (see Figure 1) makes visible the shared understanding of the theory underpinning the intervention and why specific short term and medium term outcomes are sought. This is a very practical and focused approach to evaluation which provides direct answers to evaluation questions and provides "value" judgements as to how successful the project is in achieving its outcomes and how high quality the intervention is.

A process of valuing of the outcomes is explicit as part of this evaluation design so that conclusions can be drawn about the merit and worth of the evaluated intervention (Scriven, 1991). This involves four steps: (1) establish criteria of merit (aspects of an evaluation that define whether it is good or bad and whether or not it is valuable or not valuable; (2) construct standards; (3) measure performance and compare with standards; and (4) synthesise and integrate data on performance into a judgement of merit or worth (Fournier, 1995).

The evaluation includes both process and outcome evaluation. The process evaluation data collected enables evaluative judgements to be made as to the quality of the implementation of the *Get Out! Stay Out!* programme and also provides information to assist interpretation of the outcome evaluation data.

## Process Evaluation

Process evaluation is the systematic collection of information about an intervention, its activities, implementation, context and other key characteristics. Process evaluation also involves making a judgement about the quality of the intervention against predetermined criteria and standards.

Process evaluation involves the collection of information to describe what a programme includes and how it functions over time. In and of itself, the information is 'neutral'. It is merely descriptive and does not reflect 'quality' until it is compared to an external set of standards. For the current evaluation, quality criteria relate to the intervention – The *Get Out! Stay Out!* programme.

## Outcome evaluation

Outcome evaluation is any evaluative activity directed at determining the short, intermediate and long-term outcomes of a project. It looks at whether a project has achieved the outcomes it is seeking. Where this can be done, this is very useful information for stakeholders, particularly if it is in a form in which the effectiveness of the project being evaluated can be compared with other strategies for achieving the same outcomes.

## 5.5 Evaluation questions

In order to meet the evaluation objectives a process and outcome evaluation was undertaken. Four broad questions guide the evaluation:

### Process evaluation

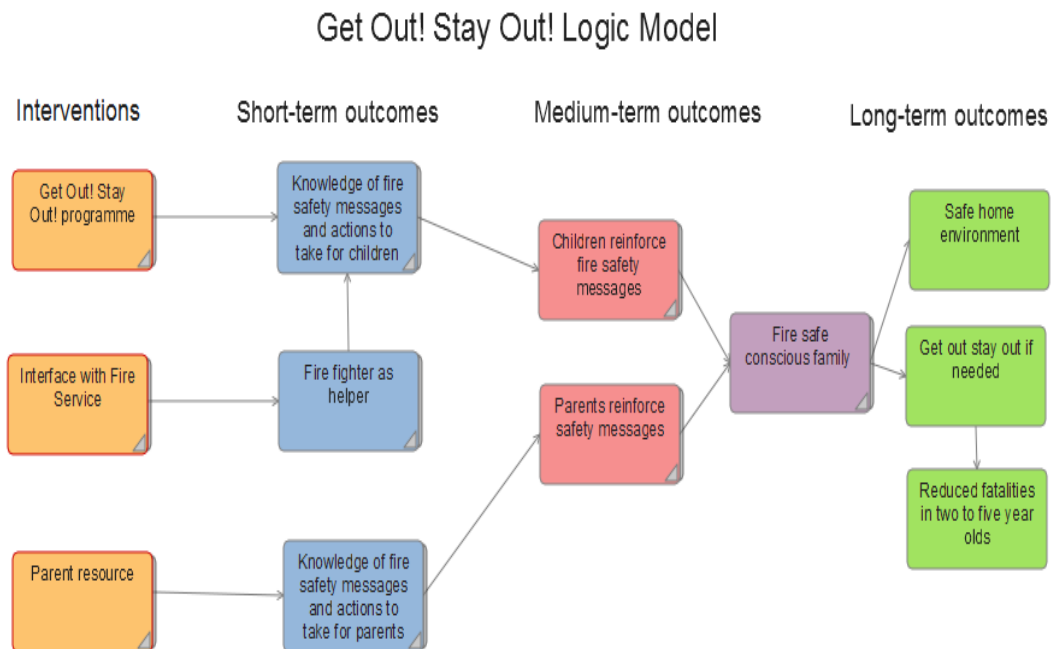
- What is the quality of the content, design and delivery of the *Get Out! Stay Out!* fire safety programme?
- What is the quality of the parent resource?
- What is the quality of the interface with the fire service?

### Outcome evaluation

- How successfully have the outcomes been achieved? How well have *Get Out! Stay Out!* activities impacted on the target audience of preschool children and their parent(s)/caregiver(s)?

## 5.6 Programme logic

A logic model was developed in consultation with the NZFS (Figure 1). The evaluation focused on collecting data related to the three interventions and the short and medium-term outcomes.



doview.com model

Figure 1: Get Out! Stay Out! Logic Model

## 5.7 Establishing evaluation criteria and performance standards

The evaluation criteria were developed in consultation with the NZFS (Table 1). For each of the interventions and outcomes, criteria (dimensions of interest) and standards of performance for each criteria were established jointly by the evaluators and the New Zealand Fire Service before data collection began. These criteria and standards are written as rubrics that can be understood as statements of what is 'valued' (i.e., what is considered good, valuable, or important) in respect of achieving the outcomes and the quality of the interventions. These statements are explicit as to how the quality and success of the programme will be determined. The criteria and standards were informed through drawing on the knowledge/understanding that already exists with the NZFS; the literature review and expert knowledge of the evaluators.

Table 1: Evaluation criteria

Interventions and outcomes	Evaluation criteria
<i>Get Out! Stay Out!</i> programme	Evidence informed Appropriate programme and messages Simplicity of messages Links to Te Whariki curriculum Messages and information clear Visual and audio resources Short, sharp, repetition of messages Engaging and interesting for children
Interface with fire service	Evidence informed Appropriate, relevant, experiential activities Children engaged, participate and show interest
Parent resource	Evidence informed Appropriate messages Simplicity of messages Messages and information clear Visually engaging resources Timely Material received in appropriate manner
Knowledge of fire safety messages and actions to take for children	Fire is hot and fast What smoke alarms and extinguishers are and what they sound like Importance of shouting fire, fire, fire! In a fire children should get out, stay out In a fire, meet at a safe meeting place Matches and lighter safety
Fire fighter as helper	Children view fire fighter as a safe, helpful person
Children reinforce fire safety messages	Children talk about fire issues without prompting Children encourage parents to address fire issues
Fire safe conscious family	Smoke alarms installed and operating Escape plan created Practice escape Matches and lighters out of reach of children

### *Evaluation performance standards*

The evaluation performance standards for the process and outcome evaluation are detailed in Tables 2 and 3.

**Table 2: Process evaluation**

Excellent	A clear example of very strong or exemplary performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Any gaps or weaknesses are not significant and are managed effectively.
Very good	Strong performance to in relation to the quality of the <i>Get Out! Stay Out!</i> programme. No significant gaps or weaknesses, and less significant gaps or weaknesses are mostly managed effectively.
Good	Acceptable or fair performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Some gaps or weaknesses. Meets minimum expectations/requirements.
Poor	Unacceptably weak performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Does not meet minimum expectations/requirements.

**Table 3: Outcome evaluation**

Excellent	A clear example of very strong or exemplary performance in relation to the success of the outcomes of the <i>Get Out! Stay Out!</i> programme. Any gaps or weaknesses are not significant and are managed effectively.
Very good	Strong performance to in relation to the success of the outcomes of the <i>Get Out! Stay Out!</i> programme. No significant gaps or weaknesses, and less significant gaps or weaknesses are mostly managed effectively.
Good	Acceptable or fair performance in relation to the success of the outcomes of the <i>Get Out! Stay Out!</i> programme. Some gaps or weaknesses. Meets minimum expectations/requirements.
Poor	Unacceptably weak performance in relation to the success of the outcomes of the <i>Get Out! Stay Out!</i> programme. Does not meet minimum expectations/requirements.

## 5.8 Data collection

Data collection was driven by the needs of the evaluation with only data identified at the criteria and standards setting stage being collected. Data were collected through interviews with NZFS staff and interviews with preschool staff representing centres in Northland, Auckland and Waikato. Initially, we intended to do focus groups with preschool teachers, however the logistics of this meant that teachers were unable to fit in with suggested times. They indicated a preference for either a face-to-face or telephone interview. Two teachers emailed their responses to the questions.

### Interviews

Seventeen early childhood centres were involved in the evaluation. Table 2 shows the demographics of the early childhood centres involved in the evaluation. These data were accessed from the most recent Education Review Office reports for each centre. Seventeen interviews were conducted with preschool teachers representing 17 centres.

Table 4: Preschool demographics

Centre	Institution Type	Authority	Area	Ethnic Composition
A	Te Kohanga Reo	Private/independent	Auckland, North	All New Zealand Maori
B	Education and Care Service	Community based	Auckland, North	Majority Samoan
C	Education and Care Service	Private/independent	Auckland, West	Multi cultural mix
D	Education and Care Service	Private/independent	Auckland, South	Multi cultural mix
E	Education and Care Service	Private/independent	Auckland, East	Majority New Zealand European/Pakeha
F	Education and Care Service	Private/independent	Auckland, Central	Majority New Zealand European/Pakeha
G	Education and Care Service	Private/independent	Northland	Predominantly Maori/New Zealand European/Pakeha mix
H	Kindergarten	State	Auckland, West	Multi cultural mix
I	Kindergarten	State	Auckland, East	Multi cultural mix
J	Kindergarten	State	Auckland, East	Multi cultural mix
K	Kindergarten	State	Auckland, North	Multi cultural mix
L	Kindergarten	State	Auckland, North	Majority New Zealand European/Pakeha
M	Kindergarten	State	Auckland, North	Majority New Zealand European/Pakeha
N	Kindergarten	State	Auckland, North	Majority New Zealand European/Pakeha
O	Kindergarten	State	Auckland, North	Majority New Zealand European/Pakeha
P	Education and Care Service	State	Hamilton	Over half New Zealand Maori
Q	Education and Care Service	State	Hamilton	Over half New Zealand Maori

### **Interviews with NZFS staff**

Three NZFS staff were contacted and one was available to be interviewed within the timeframe.

### **Parent survey**

All centres who participated in the evaluation were asked to promote the online survey to their parents. Entry into a draw to win a \$200 Warehouse voucher was offered as an incentive for completing the survey. In spite of extensive advertising and promotion, only 23 responses to the survey were received. The main reason for lack of responses was that the cohort of parents of children who had been involved in *Get Out! Stay Out!* had moved from the preschool centre to school and were therefore unavailable to complete the survey.

## **5.9 Data analysis and synthesis of evaluation findings**

A general inductive analytic approach was used to analyse the interview data (Thomas, 2006). This allowed the raw data to be summarised and linked closely to the evaluation questions and evaluation criteria. Descriptive statistics were prepared for the quantitative survey data. These analysed data were woven together and synthesised by the evaluators in order to identify the standards of performance (i.e., to determine to what extent the prioritised outcomes were achieved and determine the quality of the selected components of the intervention).

## 6.0 Evaluation results

The evaluation questions provide the structure for reporting the evaluation results. Relevant data collected during the evaluation are presented in this section and used to provide ‘direct answers’ to the evaluation questions. For each evaluation question the evaluation criteria and sources of data are identified; relevant evaluation data are presented; and data are synthesised to make a determination of merit based on a rubric of performance standard statements. An overall evaluative assessment of *Get Out! Stay Out!* is made in Section Seven.

### 6.1 What is the quality of the content, design and delivery of the *Get Out! Stay Out!* fire safety programme?

#### 6.1.1 Purpose of the evaluation question and criteria

The purpose of this question is to determine how the *Get Out! Stay Out!* programme has been planned and implemented. Criteria around planning and implementation were developed to guide the making of this determination (see Table 5). Data sources were interviews with preschool teachers, NZFS staff, the literature review and review of programme materials.

Table 5: Criteria for the evaluation question: What is the quality of the content, design and delivery of the *Get Out! Stay Out!* fire safety programme?

<b><i>Get Out! Stay Out!</i> programme criteria</b>
<ul style="list-style-type: none"><li>• Evidence informed</li><li>• Appropriate programme and messages</li><li>• Simplicity of messages</li><li>• Messages and information clear</li><li>• Short, sharp, repetition of messages</li><li>• Visual and audio resources</li><li>• Engaging and interesting for children</li><li>• Links to Te Whariki curriculum</li></ul>



### 6.1.2 Evaluation data

The evaluation data are presented under each criteria

#### **Evidence informed**

The content of *Get Out! Stay Out!* is consistent with the available evidence outlined in the literature review which states that fire safety lessons for preschool children need to be interactive and contain key fire safety messages such as getting out and staying out when there is a fire.

#### **Appropriate programme and messages**

Overall, the messages were reported to be age appropriate, suitable for the mixed age groups attending the centres and were particularly appropriate for three and four year olds. Teachers' comments related to the appropriateness of the programme for English speaking children, the appropriateness for different cultures and those children for whom English was the second language.

For those centres with mainly English speaking children the programme was easy to use, worked well and had good teaching and learning materials.

*We found it very easy to use and we were supplied with good materials. Ninety-five percent of our children are English speaking.*

*We used it most when we had visits from the fire service, the messages are very appropriate particularly when a group of firemen came. We practised getting out and staying out.*

Some centres had children from a wide range of ethnicities and were using the programme as is (in English). They considered the basic knowledge was easy to understand through the use of the visual and audio resources and the simplicity of the messages.

*We didn't need to translate it, we are multi-cultural here with a lot of languages, but we just use the basic knowledge. The words are basic so it was easily understandable across the board. I think it's really appropriate and understandable.*

*The children enjoyed the catchy song and they were able to identify what to do in a fire after this programme. This was fine for us in English. The children understood the messages with little further explanation from the teachers. It needs no improvements, we found it to be a great resource.*

In contrast, kohanga and Samoan teachers were translating the material into their languages to ensure it was appropriate for their children. They were not aware of the Te Reo version of *Get Out! Stay Out!*

*I have to translate everything. What I do is look at it and take a broad summary of what it is saying and write up my own. You are supposed to be thinking Te Reo all the time, everything has to be translated.*

### **Simplicity of messages**

Most preschool teachers considered the messages were very simple, to the point and easy for the children to understand.

*Really easy for the children to understand and the song that goes with it is really easy to learn.*

*The words are really simple and the instructions are really simple so Get Out! Stay Out! is what you hear around the kindergarten.*

*Short and sweet and straight to the point.*

### **Messages and information clear**

The *Get Out! Stay Out!* messages and information were found to be very clear. Teachers reported the messages were “to the point” and children understand the need to get out and stay out if there is a fire. For example when centres held fire drills and the alarm went off, children knew that they needed to get out and stay out. Key messages communicated were get out, stay out, where to meet, not to play with fire, firemen are helpers, and what a fire alarm sounds like.

*They were really good because it's straight to the point, get out, stay out tells you how to get out.*

*If our alarm goes off, they leave immediately, don't take anything with them, walk sensibly and stay out.*

*I can ask any of the children I have taught where do you go at home if there is a fire and they will tell you “to the letterbox”.*

*When we've had fire fighters in, it shows that they are there to help, not to be scared of them, especially when they are dressed up in their gear. They are there to help, especially for the two to three year olds when they are still scared of masks.*

### **Short, sharp, repetition of messages**

The *Get Out! Stay Out!* messages were found to be short and repetitive which helped children remember them.

*It is that repetition. It is a catchy phrase and it is repetitive in the story.*

*Repetitive, catchy phrases – they all remember that.*

### **Visual and audio resources**

The visual and audio resources for *Get Out! Stay Out!* were mostly well-utilised by teachers who reported they were extremely useful in reinforcing key messages and engaging the children in the programme.

*The big book is really useful to have at mat time, it is nice and bright, the characters are really good, easy for the children to look at and take information from it. We go through the story and explain what each character is and the music is real good as well because the children know the words. It is an easy song to learn and it is effective.*

*The story book is interesting, the illustrations are very good and capture their attention, the CD, the children love, enjoy listening to it and singing. It's all learning through play, interest and enjoyment. It's a fun thing.*

### **Engaging and interesting for children**

Preschool teachers spoke very positively about how well the programme engaged the children. The content and design of the resource ensured that children's attention was held.

*They relate to the fire alarm, they relate to images of the smoke alarm, they relate to the fireman and the language that goes with it and the music and the song.*

Some teachers observed children demonstrating their learning through dramatic play (Figure 2).

*They do dramatic play a lot because we have fire jackets and they all go around putting out fires and rescuing people up trees. So I think they are all inspired by it, especially the boys, and the girls, are into it as well.*



Figure 2: Children engaged in dramatic play

Teachers were mindful of children's ages, attention span and interest level and tended to deliver the programme in short bites to keep them engaged.

*At our centre we do have children coming from all different backgrounds. Some are very easy to get engaged and they are interested in things like this and some children may not be. We keep discussion and reading time to five minutes or ten at the maximum, in which time we would get all their attention.*

### Links to Te Whariki curriculum

*Get Out! Stay Out!* demonstrates strong links to the Te Whariki curriculum strands with regard to belonging, wellbeing, communication, contribution, and exploration. Preschool teachers provided a wide range of examples of these links as illustrated in the quotes below:

*Understanding people in our wider community – the sense of belonging (Belonging)*

*The message is actually taken out into the community and family especially with the escape plan discussing what would happen when they are at home and if they have a fire (Belonging).*

*The most important part to me is wellbeing, the children experience an environment where they are kept safe from harm (Wellbeing).*

*It is basic health and safety. They know to get out for their safety (Wellbeing)*

*Communication strand, they know the words to use, we tell them about the smoke alarms, fire safety, fire engines, all the equipment such as hoses on the fire engine (Communication)*

*Contribution, the children all need to participate. We all help each other when things like that happen. (Contribution)*

*Also links into the exploration strand where they can explore safe ways to have power over their bodies (Exploration)*

### 6.1.3 Determination of merit

For the evaluation question “What is the quality of the content, design and delivery of the *Get Out! Stay Out!* programme” performance is rated as excellent (Table 6). Data from teachers indicates that all evaluation criteria have been extremely well met.

Table 6: Merit determination

Excellent	A clear example of very strong or exemplary performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Any gaps or weaknesses are not significant and are managed effectively.
Very good	Strong performance to in relation to the quality of the <i>Get Out! Stay Out!</i> programme. No significant gaps or weaknesses, and less significant gaps or weaknesses are mostly managed effectively.
Good	Acceptable or fair performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Some gaps or weaknesses. Meets minimum expectations/requirements.
Poor	Unacceptably weak performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Does not meet minimum expectations/requirements.

## 6.2 What is the quality of the content, design and delivery of the *Get Out! Stay Out!* parent resource?

### 6.2.1. Purpose of the evaluation question and criteria

The purpose of this question is to determine how the *Get Out! Stay Out!* parent resource has been planned and implemented. Criteria around planning and implementation were developed to guide the making of this determination (see Table 7). Data sources were interviews with preschool teachers, parent survey, literature review and review of programme materials.

Table 7: Criteria for evaluation question: What is the quality of the content, design and delivery of the parent resource?

Parent resource criteria
<ul style="list-style-type: none"> <li>• Evidence informed</li> <li>• Appropriate messages</li> <li>• Simplicity of messages</li> <li>• Messages and information clear</li> <li>• Visually engaging resources</li> <li>• Timely</li> <li>• Material received in appropriate format</li> </ul>

### 6.2.2 Evaluation data

The evaluation data are reported under each criteria.

#### Received *Get Out! Stay Out!* resources

Parents were asked if they had received *Get Out! Stay Out!* resources. Nearly all (n=22) parents recalled receiving the printed booklet, 16 recalled receiving an escape plan to complete and two recalled receiving a book to read to their children and a booklet with the *Get out, stay out well done* song (Table 8).

Table 8: Resources received (n=23)

	Counts	Percentage (%)
Parent/caregiver resource (printed booklet)	22	95.7%
Escape plan to complete	16	69.6%
Any other information (please describe) <i>Book for the kids</i> <i>Booklet with the get out stay out well done song &amp; CD</i>	2	8.7%
Don't recall receiving anything	0	0.0%

Teachers also reported there was evidence that parents had received the resources as they were engaged in the home activities.

*From what we can see the parents have been involved with the pack showing the children and making plans for what happens if there was a fire in their house. So they have talked to the children about where to go and what to do if there was a fire.*

### **Evidence informed**

The provision of parent resource materials is in keeping with best practice for fire safety programmes involving children. The resource materials provide home based activities that reinforce the learning that occurs for children at their preschool centre.

### **Appropriate messages**

All parents either strongly agreed or agreed that the fire safety messages were appropriate to their whanau/family (Table 9).

**Table 9: The fire safety messages are appropriate for our whanau/family. (n = 23)**

	Counts	Percentage (%)
Strongly agree	16	69.6%
Agree	7	30.4%
Neither agree nor disagree	0	0.0%
Disagree	0	0.0%
Strongly disagree	0	0.0%

### **Simplicity of messages**

All parents either strongly agreed or agreed that the messages were easy to understand (Table 10).

**Table 10: The fire safety messages were easy to understand. (n = 23)**

	Counts	Percentage (%)
Strongly agree	15	65.2%
Agree	8	34.8%
Neither agree nor disagree	0	0.0%
Disagree	0	0.0%
Strongly disagree	0	0.0%

### **Messages and information clear**

All parents either strongly agreed or agreed that the fire safety messages and information were clear (Table 11).

**Table 11: The fire safety messages and information were clear. (n = 23)**

	Counts	Percentage (%)
Strongly agree	17	73.9%
Agree	6	26.1%
Neither agree nor disagree	0	0.0%
Disagree	0	0.0%
Strongly disagree	0	0.0%

The Get Out! Stay Out! message was the most commonly reported. Other messages gained were: having an escape plan, deciding on a safe meeting place and doing a fire safety check.

*My children enjoyed the booklet, we had our pretend fire drill. We all got down low, crawled out and stayed outside. We had several escape routes and a specific meeting place. We also had several working fire alarms.*

### Visually engaging resources

All parents either strongly agreed or agreed that the fire safety resources were visually appealing and how they looked encouraged them to use them with their whanau/family (Table 12).

Table 12: The look of the fire safety resources encouraged me to use them with my whanau/family. (n = 23)

	Counts	Percentage (%)
Strongly agree	12	52.2%
Agree	11	47.8%
Neither agree nor disagree	0	0.0%
Disagree	0	0.0%
Strongly disagree	0	0.0%

### Timely

At the same time *Get Out! Stay Out!* was being delivered in the preschools, parents were provided with the parent resource. The preschool teachers considered this was good practice to have children’s learning reinforced at home.

*It was nice to have the packs so the children could take them home. You get them talking about it at home.*

Parents either strongly agreed (n=15) or agreed (n=8) that they received the fire safety resource at the same time their children were learning about fire safety (Table 13).

Table 13 Parents receiving fire safety resource at the same time as their children were learning about fire safety (n=23)

	Counts	Percentage (%)
Strongly agree	15	65.2%
Agree	8	34.8%
Neither agree nor disagree	0	0.0%
Disagree	0	0.0%
Strongly disagree	0	0.0%

### Material received in an appropriate format

While the parent resource was in an appropriate format for English speaking parents teachers suggested a wider variety of formats could be developed to better cater for those with English as a second language. For example, greater use of technology such as iPads,



applications on mobile phones and access to online resources could enhance home-based fire safety activities.

### Determination of merit

For the evaluation question “What is the quality of the parent resource?” the rating is very good (Table 14). However, this rating needs to be treated with caution due to the low response rate from parents. On the basis of the available evidence it would appear that the resource has been well-received and utilised.

Table 14: Merit determination

Excellent	A clear example of very strong or exemplary performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Any gaps or weaknesses are not significant and are managed effectively.
Very good	Strong performance to in relation to the quality of the <i>Get Out! Stay Out!</i> programme. No significant gaps or weaknesses, and less significant gaps or weaknesses are mostly managed effectively.
Good	Acceptable or fair performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Some gaps or weaknesses. Meets minimum expectations/requirements.
Poor	Unacceptably weak performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Does not meet minimum expectations/requirements.

## 6.3 What is the quality of the interface with the fire service?

### 6.3.1. Purpose of the evaluation question and criteria

The purpose of this question is to determine how the fire service interfaces with the implementation of the *Get Out! Stay Out!* programme. Criteria around this interface were developed to guide the making of this determination (see Table 15). Data sources were interviews with preschool teachers, parent survey, the literature review and review of programme materials.

Table 15: Criteria for the evaluation questions: What is the quality of the interface with the fire service?

<b>Interface with fire service criteria</b>
<ul style="list-style-type: none"> <li>• Evidence informed</li> <li>• Appropriate, relevant, experiential activities</li> <li>• Children engaged, participate and show interest</li> </ul>

### 6.3.2 Evaluation data

The evaluation data are reported under each criteria.

#### **Evidence informed**

There is evidence in the literature that fire safety programmes delivered in partnership with fire services contribute to the prevention of fires and deaths, the improvement of smoke alarm ownership and the improvement of children's fire safety knowledge. The implementation of *Get Out! Stay Out!* is consistent with this evidence.

#### **Appropriate, relevant, experiential activities**

A fire service representative with the key role of providing fire safety education described the process he used to ensure children were receiving quality, appropriate and relevant information. He emphasised that *Get Out! Stay Out!* was an education programme. Rather than just providing preschool teachers with the *Get Out! Stay Out!* resource and leaving them to implement it, the process involved an initial introduction to the material, followed by subsequent visits once the teachers had implemented the resource.

*I spend half an hour with teachers and children and I actually take them over the role and I give a presentation, a starting presentation to the children and talk to all the teachers to show their role and how they can, when I leave, continue my work. There are take home books for both children and parents and I ask them to have a look at the take home things for parents because their homes are just as important. I spend half an hour there and then I leave them with it and when they're ready they'll contact me again.*

Teachers valued this approach and considered it was appropriate and engaging for the children.

*When he came he was child friendly. He engaged with the children at their own level. He used a good tone of voice. He read the book and he even sang the song. They had a lovely, whole interactive experience with him. He left the resources afterwards for us to work with like the map.*

Teachers were encouraged by the fire service representative to work intensively with the children to ensure they could recall the fire safety messages. Once they had achieved this, then it was appropriate for them to contact him to organise the local fire service visit.

*You work with them for four weeks, six weeks, whatever you like and when you're ready and you know that those children know those messages backwards then you can call me up and I'll organise the local fire station to come down with the fire engine and they'll do a knowledge test on the children to see that they do know the messages.*

The majority of centres had fire service visits. The preschool teachers regarded their fire service visits as extremely appropriate for their children. The visits were very popular and a focal point for the children's learning about fire safety.

*We get a visit and it always goes down well, it is one of the most popular visits, they love it. It is at the right level, they get the kids involved. They have made it simple enough to understand, enjoy and be part of. They made it fun rather than scary.*

*They were really good and age appropriate and it wasn't too technical, it was very basic.*

*They were really child friendly, they brought humour, laughter, they dressed up and showed the children the breathing apparatus. They were really involved with the children.*

The activities done at the fire service visit were very relevant to the children and provided them with hands-on experiential learning opportunities.

*They went through all the gear and the helmets and they talked to the children and the children asked questions. They took all the children and they were allowed to go through the fire truck. It was really cool for them and exciting as well and they turned the siren on.*

### **Children engaged, participate and show interest**

Teachers reported there was a high level of engagement, participation and interest shown by the children. They were very excited about having firemen and fire trucks at their centre and enjoyed the opportunities they had to interact with the firemen and the equipment. The firemen engaged with the children through conversation and demonstration of fire safety processes.

*They brought their fire truck, the firemen came in and showed us all the suits, talked about what happens when you ring when there is a fire and if you ring 111. They talked about safe routes they have in the house and they talked about the kindergarten and where to go when there is a fire drill. They asked the children where they go. They brought the gear in and some of the children got dressed up. All the children got to see the equipment on the fire truck and got in it. They were really excited and had a great time.*

### *Additional data:*

#### **Parents' involvement in *Get Out! Stay Out!***

Pre-school teachers informed parents when the fire service visit was taking place and there was a high level of parent involvement. This helped with the interface between home and centre and the communication of fire safety messages.

*Lots of parents came along with their children to the visit and interacted, they listened to the fire safety message. We all sat down together and listened to the firemen talk. They got dressed in front of us ... The parents enjoyed the visit as much as the children.*

*We also sent the packs home with the parents and talked about the safety routes and what the children should know at home. Children came back and showed us what they had done and how to get out of their house. A few of the parents took it on board and did it at home with their children.*

#### **6.3.3 Determination of merit**

For the evaluation question "What is the quality of the interface with the fire service?" performance is rated as excellent (Table 16). Data from teachers indicated that this was an extremely valuable component of programme implementation which also allowed for engagement of parents.

**Table 16: Merit determination**

Excellent	A clear example of very strong or exemplary performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Any gaps or weaknesses are not significant and are managed effectively.
Very good	Strong performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. No significant gaps or weaknesses, and less significant gaps or weaknesses are mostly managed effectively.
Good	Acceptable or fair performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Some gaps or weaknesses. Meets minimum expectations/requirements.
Poor	Unacceptably weak performance in relation to the quality of the <i>Get Out! Stay Out!</i> programme. Does not meet minimum expectations/requirements.

## 6.4 How successfully have the outcomes been achieved? – How well have *Get Out! Stay Out!* activities impacted on the target audience of preschool children and their parent(s)/caregiver(s)?

### 6.4.1 Purpose of evaluation question and criteria

The purpose of this question is to determine how successfully the following outcomes have been achieved: Knowledge of fire safety messages and actions to take for children, fire fighter as helper, children reinforce fire safety messages, parents reinforce fire safety messages and fire conscious family. Criteria were developed to guide the making of this determination (see Table 17). Data sources were interviews with preschool teachers and the parent survey results.

**Table 17: Criteria for the evaluation questions: How successfully have the outcomes been achieved? - How well have *Get Out! Stay Out!* activities impacted on the target audience of preschool children and their parent(s)/caregiver(s)**

<b>Criteria: Knowledge of fire safety messages and actions to take for children</b>
<ul style="list-style-type: none"><li>• What smoke alarms and extinguishers are and what they sound like</li><li>• Importance of shouting fire, fire, fire!</li><li>• In a fire children should get out, stay out</li><li>• In a fire, meet at a safe meeting place</li><li>• Matches and lighter safety</li><li>• Fire is hot and fast</li></ul>

### 6.4.2 Evaluation data

#### *Outcome: Knowledge of fire safety messages and actions to take for children*

There is clear evidence that children have gained knowledge about fire safety messages and actions to take if there is a fire.

#### **What smoke alarms and extinguishers are and what they sound like**

Teachers reported that children had gained knowledge of smoke alarms and extinguishers and their sounds. They gained this knowledge through seeing images of alarms in the story book, the use of alarms in the song and demonstrations through fire drills and the fire visit.

*Get Out! Stay Out! gives them a strategy. They recognise there are signs of fire. So if you see smoke or smoke alarms go off they know that that is fire.*

*We always do the song in the big book so they are involved in the actions, beep, beep, beep, the fire alarm.*

### **Importance of shouting fire, fire, fire!**

Several teachers commented that they specifically taught children to shout out fire, fire, fire.

*Shouting out fire, fire, fire, really loudly.*

### **In a fire children should get out, stay out**

*Get Out! Stay Out!* was the most commonly reinforced message and teachers considered that all children were familiar with this, understood what it meant and were repeating the message in their play.

*When they were outside there were the one's saying 'Oh there is a fire, what we do now is we have to get out and stay out' and they would chant that.*

*They would come out with comments when they were playing and would re-enact firemen when they were playing outside. You would hear the children in the playground saying 'get out, stay out'*

*With our fire drills I noticed around the time we had been doing Get Out! Stay Out! they were like right, we have to get out and stay out, there is a fire.*

All parents surveyed reported their knowledge of the *Get Out! Stay Out!* message and that they were reinforcing this message at home.

*To get out and stay out, know your exits, to find an adult to help ASAP.*

*Get out of the house and stay out, meet somewhere safe – the letterbox, call 111.*

*When there's a fire, get out of the house and stay out.*

### **In a fire, meet at a safe meeting place**

Children were taught about the safe meeting place at their centres and in their home environments.

*I think the message is there. The fire alarm goes off and they know that they get out and they know where to go and assemble at the assembly point.*

*They knew to go straight down to the fence, that's exactly where they needed to go.*

### **Matches and lighter safety**

A few teachers commented that children showed understanding of not handling matches and lighters.

*We don't play with matches and lighters, one of our four year old girls told her mum to get rid of the lighter, that's not safe.*

### **Fire is hot and fast**

Teachers communicated that fire is hot and fast through the use of the story book and the CD.

*It's through the repetitive sound of the music with the track and the song comes on the CD. It is very appealing to the children because it has a catchy tune and repetitive language through using hot, hot, hot, hot for fire, get out stay out well done, fire alarm going beep, beep.*

The fire is hot and fast message was also communicated to children in the initial and subsequent visits by the fire service representative.

*I'll start to read to them and I'll be working through it and the first thing is, fire is hot, fire is hot.*

### ***Outcome: Fire fighter as helper***

#### **Children view fire fighter as a safe, helpful person**

Children learnt about the role of the fire fighter through the fire service visiting their centres and through the posters. The reality of the fire service visit ensures that children are familiar with the fire fighter and their equipment.

*The children loved them, absolutely loved them, they were heroes. The drama of seeing the fire engine on the way to fires and here are these firemen talking to them. The children began to see them like people they could trust, people who were looking after them, being there for them. They were not afraid ... the children may well be afraid if they hadn't had the chance to have personal contact.*

### *Outcome: Children reinforce fire safety messages*

#### **Children talk about fire issues without promoting**

As mentioned earlier, children were using the messages they had learnt in their play and with their peers. Fifteen parents either strongly agreed or agreed that their children talked about fire issues without being asked. Five neither agreed nor disagreed and three disagreed (Table 18).

**Table 18: My child/children talk about fire issues without being asked. (n = 23)**

	Counts	Percentage (%)
Strongly agree	7	30.4%
Agree	8	34.8%
Neither agree nor disagree	5	21.7%
Disagree	3	13.0%
Strongly disagree	0	0.0%

#### **Children encourage parents to address fire issues**

Fifteen parents either strongly agreed or agreed that their children had initiated discussion around the family addressing fire safety issues. Four parents neither agreed nor disagreed and four disagreed (Table 19).

**Table 19: My child/children encourage me/us to address fire issues. (n = 23)**

	Counts	Percentage (%)
Strongly agree	7	30.4%
Agree	8	34.8%
Neither agree nor disagree	4	17.4%
Disagree	4	17.4%
Strongly disagree	0	0.0%

### *Outcome: Fire safe conscious family*

#### **Smoke alarms installed and operating**

All but one family (n=22) reported they had smoke alarms installed and operating (Table 20).

**Table 20: Our whanau/family has smoke alarms installed and operating. (n = 23)**

	Counts	Percentage (%)
Yes	22	95.7%
No	1	4.3%
Unsure	0	0.0%



## Escape plan created

Sixteen out of 23 parents had created a fire escape plan (Table 21)

Table 21: Our whanau/family has a fire escape plan. (n = 23)

	Counts	Percentage (%)
Yes	16	69.6%
No	6	26.1%
Unsure	1	4.3%

Twelve parents had designed their fire escape plans using the *Get Out! Stay Out!* plan provided. Some teachers commented that while only a few of the children brought their family's escape plan back to the centre, informal conversations with parents indicated they had developed these with their children (Table 22).

Table 22: Our whanau/family has designed a fire escape plan using the resource (paper plan). (n = 17 = those answered 'yes' or 'no' in escape plan created.)

	Counts	Percentage (%)
Yes	12	70.6%
No	5	29.4%
Unsure	0	0.0%
We did not receive the resource	0	0.0%

\*Please note that the respondent who was 'unsure' whether his/her family has a fire escape plan said 'yes' for created a fire escape plan.

## Practise escape

Just over half the parents reported that their family had practised how to escape if there is a fire (Table 23).

Table 23: Our whanau/family has practised how to escape if there is a fire. (n = 23)

	Counts	Percentage (%)
Yes	12	52.2%
No	11	47.8%
Unsure	0	0.0%

Children were keen for their families to practise the escape plan. For example, one parent commented:

*It was really great for the kids. They had fun singing the get out, stay out, well done and also very determined for us to practise the escape plan. We couldn't have gotten away with not doing it.*

### Matches and lighters out of reach of children

Seventeen of the 23 respondents reported they kept matches and lighters out of reach of their children (Table 24). Six did not respond to this question.

Table 24: Matches and lighters are kept out of reach of the children. (n = 23)

	Counts	Percentage (%)
Yes	17	100.0%
No	0	0.0%
Unsure	0	0.0%

### 6.4.3 Determination of merit

For the evaluation question “How successfully have the outcomes been achieved?” (Outcome evaluation) performance falls between excellent and very good (Table 25). Data from teachers indicates that children clearly understand the key messages and actions to take if there is a fire and this is an excellent outcome. The parent survey data is limited and shows some variation across outcomes. The strongest outcomes for home-based fire safety were the installation of fire alarms and knowledge of the get out, stay out message.

Table 25: Merit determination

Excellent	A clear example of very strong or exemplary performance in relation to the success of the outcomes of the <i>Get Out! Stay Out!</i> programme. Any gaps or weaknesses are not significant and are managed effectively.
Very good	Strong performance to in relation to the success of the outcomes of the <i>Get Out! Stay Out!</i> programme. No significant gaps or weaknesses, and less significant gaps or weaknesses are mostly managed effectively.
Good	Acceptable or fair performance in relation to the success of the outcomes of the <i>Get Out! Stay Out!</i> programme. Some gaps or weaknesses. Meets minimum expectations/requirements.
Poor	Unacceptably weak performance in relation to the success of the outcomes of the <i>Get Out! Stay Out!</i> programme. Does not meet minimum expectations/requirements.

## 7.0 Summary of evaluation results

The results of the evaluation are summarised in Table 26. Overall *Get Out! Stay Out!* has performed at a very good to excellent standard in relation to the evaluation questions.

*Get Out! Stay Out!* is:

- Characterised by strong alignment with best practice fire safety programmes targeting young children
- Well planned and implemented
- Conveying the *Get Out! Stay Out!* message to children and their families
- Engaging children in the programme
- Contributing to fire safety knowledge for children
- Contributing to the development of a fire conscious family
- Presenting the fire fighter as a helper and trusted community representative

Table 26: Summary of evaluation questions and merit determination

Evaluation questions	Merit determination
What is the quality of the content, design and delivery of the <i>Get Out! Stay Out!</i> fire safety programme? (Process evaluation)	Excellent
What is the quality of the parent resource?	Very good
What is the quality of the interface with the fire service?	Excellent
How successfully have the outcomes been achieved? (Outcome evaluation) – How well have <i>Get Out! Stay Out!</i> activities impacted on the target audience of preschool children and their parent(s)/caregiver(s)?	Very good to excellent

## 8.0 Ideas for the future

While this evaluation has produced good evidence that *Get Out! Stay Out!* is performing at a very good to excellent level, there are some issues and areas that could be usefully considered in the ongoing delivery of fire safety programmes targeting preschool children and their families.

### 8.1 Additional materials and formats

Teachers suggested that the programme could be extended to include an animated DVD of the story, 'real' pictures in the big story book, having someone narrate the story on a DVD, and having a DVD of a local fire station. It was also suggested that there could be additional themes focusing on fire safety on occasions such as Guy Fawkes. Parents and teachers suggested that stickers would be a worthwhile addition to the resources. For example, when creating the escape plan one parent reported there was too much cutting and gluing.

### 8.2 Website

Teachers need to be made aware of the NZFS website and what it can offer them to enhance their teaching of the programme.

### 8.3 Materials for the very young children

Teachers considered the *Get Out! Stay Out!* resources as most appropriate for three to five year old children. They suggested some 'real beginning' resources for younger children such as a cartoon video clip or the development of additional learning songs.

### 8.4 Translation of *Get Out! Stay Out!* into different languages

Many centres were multi-cultural, with some having up to 16 ethnicities. It was suggested that translations into other languages would be an improvement, particularly for the take home information for families.

## References

- Coles, C. D., Strickland, D. C., Padgett, L., & Bellmoff, L. (2007). Games that "work": Using computer games to teach alcohol-affected children about fire and street safety. *Research in Developmental Disabilities, 28*, 518-530.
- Donaldson, S. (2007). *Program theory-driven evaluation science: Strategies and applications*. Mahwah, NJ: Erlbaum.
- Fournier, D. (Ed.). (1995). *Reasoning in evaluation: Inferential links and leaps*. San Francisco, CA: Jossey-Bass.
- Gamache, S. (2003). Reaching high risk groups. In A. E. Cote (Ed.), *Fire Protection Handbook* (pp. 5-62). Quincy, MA: National Fire Protection Association
- Gamache, S., & Porth, D. (2001). The development of an education program effective in reducing the fire deaths of preschool children. Retrieved from <http://sosfires.com/Development%20of%20Education%20Program.htm>
- Hansen, J. (1990). *Review of the development and implementation of the KID SAFE Program. RR#17711*. Emmitsburg, MD: National Fire Academy.
- Kirtley, E. (2003). Fire and life safety education: Theory and techniques. In A. E. Cote (Ed.), *Fire Protection Handbook* (pp. 5-44). Quincy, MA: National Fire Protection Association
- Kourofsky, C. E., & Cole, R. E. (2010). Young children can be key to fire-safe families. *Young Children 84-87*.
- Lesniak, R. (2003). *Evaluating fire education programs delivered by the fire department if Springfield township: Leading community risk reduction* Springfield: National Fire Academy.
- McConnell, C. F., Leeming, F. C., & Dwyer, W. O. (1996). Evaluation of a fire safety programme for preschool children. *Journal of Community Psychology, 24*(3), 213-227.
- Morrongiello, B. A., Schwebel, D. C., Bell, M., Stewart, J., & Davis, A. L. (2012). An evaluation of *The Great Escape*: Can an interactive computer game improve young children's fire safety knowledge and behaviors? . *Health Psychology, 31*(4), 496-502.
- National Fire Academy. (2003). *Discovering the road to high risk audiences (Student manual)*. Emmitsburg, MD.: National Fire Academy.
- Ogier, S. (2008). *Evaluation of the Firewise Programme for Year One and Two students* Wellington: MartinJenkins & Associates Ltd.
- Peel, B., & Schauble, L. (1979). Fire education for Sesame Street: A research study on mass media fire education for preschool children. RR#20975. New York: Children's Television Workshop.
- Schaenman, P., Stambaugh, H., Rossomando, C., Jennings, C., & Perroni, C. (1990). *Providing public fire education works*. Arlington, VA: TriData Corporation.
- Scriven, M. (1991). The Science of Valuing. In W. Shadish, Cook, T., & Leviton, L (Ed.), *Foundations of Program Evaluation: Theories of Practice* (pp. 73-118). Newbury Park: Sage Publications.
- Sharp, D. L., Blaakman, S. W., Cole, E. C., & Cole, R. E. (2005). Evidence-based multidisciplinary strategies for working with children who set fires. *Journal of the American Psychiatric Nurses Association 11*, 329-337.

- Smalley, T. (1983). Preschool children. In N. F. P. Association (Ed.), *Fire Safety Education Handbook* (pp. 43-51). Quincy, MA: National Fire Protection Association.
- Staberg, D. (1992). *An assessment of "Project Life" preschool fire safety curriculum. RR#21106*. Emmitsburg, MD: National Fire Academy.
- Ta, V. M., Frattaroli, S., Bergen, G., & Gielen, A. C. (2006). Evaluated community fire safety interventions in the United States: A review of current literature. *Journal of Community Health, 31*(3), 176-197.
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation 27*(2), 237-246.
- Walker, B. E. (2004). *Running ahead: Keeping kids safe: Preschool fire safety*. LaGrange, Georgia: LaGrange Fire Department.
- Williams, J., Sowers, J., & Blaine, S. (1986). *Project L.I.F.E. - Local involvement in fire education*. Independence, MO: Pan-Educational Institute