

Hazard Profiles and Solutions: A Summary of Evaluation of the forestry sector “Mini-HaPS cards”

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Introduction

A thousand sets of ‘Hazard Profiles and Solutions’ (HaPS) cards were distributed by FITEC and FICA in the winter of 2006. Each set comprised five passport sized cards, containing summary information (hazards and avoidance action) on a particular felling or forestry activity. The content was largely based on the ACC Safer Industries ‘forest safety guidance leaflet’ series.

Distribution was coupled with a competition (potentially winnable by 400 of the recipients) run by ACC whereby quiz entrants could win a t-shirt and enter a draw to win a chainsaw. The return rate was 35% (normally 3% for ACC surveys) and there were also telephone requests for extra supplies. The promotion was judged to be a success, but a questionnaire survey of card recipients was devised to explore the reasons for their popularity.



Aim: To evaluate the usefulness and usability of ‘Hazard Profiles and Solutions’ (HaPS) pocket training cards.

Objectives:

- To explore how the cards were used and whether use continues
- To explore impact of card contents upon perceived knowledge and practice improvement
- To explore usability of the card design and content
- To explore what made the cards popular

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Method

Six months after release of the cards, the researchers approached all 127 entrants to the HaPS card associated T-Shirt / chainsaw competition as participants for data collection, which included a mix of individual entrants and submissions on behalf of employing companies. Feedback from HaPS cards recipients was gathered through use of two different methods - postal survey and telephone survey. A pilot trial, involving phone and written contact, was undertaken among 10 recipients. Eight responses were received; all had satisfactorily completed the questionnaire and there were no adverse comments regarding style or content. As there were only minor changes in finalising the questionnaire, these data were included in the final analysis.

- Method One - Postal survey
A covering letter and a questionnaire with nine main questions relating to the research objectives, were sent to each addressee. Each questionnaire included a Freepost address for return.
- Method Two - Telephone survey
Those contacts who had not already returned a questionnaire by post were telephoned and interviewed four to six weeks later: the questionnaire was discussed among those available and willing to participate, and responses recorded by the researchers.

Results

Including the 8 responses from the pilot study, there was a total of 32 responses. There were 7 responses to the postal questionnaire mail shot, and a further 17 responses were gathered through telephone interview. The telephone and postal methods were both seen to gather useful data; the telephone interviewees found it more difficult to remember the cards in any detail, but the discussion also enabled capture of more detailed comments, of material that respondents might otherwise consider irrelevant, or critical observations of a less complimentary nature.

Participant Profiles

Table 1 shows respondent details. They varied in age from 19- 60 years (mean 40 years); twenty-nine were male and three female.

Primary Occupation	Numbers (n=32)	Area of application	Numbers
Operators	14	Driving	4
		General / logging / skidwork	9
		Mensuration	1
Foremen	4	General	1
		Cable harvesting	2
		Driving	1
Contractors	4	Logging	3
		Silviculture	1
Managerial	7	Office manager	1
		Workshop manager	1
		Operations Mment	4
		MD logging company	1
Health & safety	3	Consultant	1
		Fitec	1
		H&S Coordinator	1
Trainers/assessors	4	Operators	3
			1

Questionnaire Responses

Participants were invited to provide feedback about method of receipt and use of the cards, give opinions on the design and usefulness, and also propose ideas for future developments. In addition some also gave more descriptive information and these comments are also collated and presented below. Individual respondents sometimes provided more than one answer to one question; likewise a small number of questions remained unanswered. Use of different techniques to answer some questions means a tally of the figures does not necessarily equate with the number of respondents. Where supplementary data were given, the number of comments concerning a particular theme is reported in brackets. Each of the nine questions is repeated below and annotated according to the responses received. Two responses included collective feedback from a group rather than just the individual addressees.

Receipt of the mini-HaPS cards

Respondents received their mini-HaPS card predominately from either FITEC (15) or from their employers (13). None requested mini-HaPS cards as a result of seeing others with them, or from receiving recommendation from co-workers. Nevertheless, interview data indicated that a number of original recipients had actually passed on the sets of cards to their crews.

How did you find out about the mini-HaPS cards?	Yes	No
They were sent by FICA	4	
They were sent by FITEC	15	
They were provided by my employer	13	1
They were provided by the main contractor (<i>if different</i>)	1	1
I requested them after I saw others with them		1
They were recommended by a friend / workmate/ other (<i>role</i>)		

First impressions of the mini-HaPS cards

Respondents were asked what they did on first receipt of the cards. This was in order to gain a perspective of their initial impact, whether they were distributed at a time when it was convenient to read them, and if they were immediately passed on to end users. Almost all respondents either read the cards thoroughly (19) or had a general look though (12). Only two recipients reported that they threw them out.

What did you do with the cards when you first received them?	Yes	No
I read them all thoroughly	19	1
I had a general look through - reading certain parts	12	1
I didn't really look at any of them		1
I put them aside to read later	5	1
I threw them out	2	2
I gave them to a colleague - forestry worker - gang	4 4	
Other (<i>please describe</i>)		

Relevance of contents

The majority of respondents found that the cards helped refresh key facts (18) and/or helped them refresh employees' memories or explain good practice to other people (14). Those that learnt from them reported that the content reinforced the safety message or enabled them to see how others dealt with things. Some respondents (4) reported confusion regarding the target audience and overlap with FITEC module material and they felt that the cards were too basic for those already in the industry and should be targeted at new starters or those still at polytechnic. There was concern that content covered some material already in the FITEC module books, and that some information should have been better aligned to current documents.

How was the content of the mini-HaPS cards relevant to you?	Yes	No
They provided me with information I didn't already know	5	7
They summarised key facts to refresh my memory	18	1
They helped me improve my work methods	4	4
They helped me explain good practice to other people	14	1
They didn't help me	1	1
I learned nothing new from them	4	1
Other <i>(please describe)</i>		

Continued use of the mini-HaPS cards

Six respondents reported that they continued to read the cards for specific work information. Others have used them to provide training to others about industry hazards (7) or at a safety meeting (1), or made up additional copies (2) (one of whom circulated these as reminders at a later date). Use for training was specifically targeted at new starters (2) and there was a report of using the mini-HaPS cards for induction purposes. Ten respondents stated that they no longer used the cards, for reasons such as having already passed them on, having run out, or believing that they were related to a one-off competition.

How have you used the mini-HaPS cards in the past few months?	Yes	No
I have read them thoroughly	1	1
I have used the web-link provided		7
I read them when I wanted specific work information	6	1
I use them when I provide training for others	7	2
I copied and made up more sets to give to others	2	1
I don't use them any more	10	3
Other <i>(please describe)</i>		

Feedback on card design

The majority indicated that the mini-HaPS card design was either OK or good. One respondent placed the cards on the notice board and felt they would be more prominent if larger. There was good feedback concerning the use of cartoons on the cards, although some reported the inclusion of too much text (1) or 'cluttering' of information (1). Where adverse comments were made they generally concerned the small size and subsequent impact on size of text, pictures and volume of information that could be included. The laminate coating was seen as a real advantage (3).

How would you rate mini-HaPS card design?	Poor	OK	Good
Passport size	1	6	23
The volume of information concerning - hazard descriptions - recommended practice		9 10	16 17
The use of cartoons		8	20
The layout of text and cartoons together		10	14
The size of the writing / cartoons	2	11	13
Relevance to your work		11	16
The plastic coating		5	18
How can we improve them <i>(please describe)</i>			

Usefulness of the cards

The most popular cards concerned avoiding injuries when using a chainsaw (27), on a skid site (24) and when felling (24). One respondent felt that it was wasteful to be sent min-HaPS cards that were unrelated to their business type.

Which mini-HaPS cards were useful?	Yes	No
Avoiding injuries when 'thinning-to-waste' + 'avoiding injuries when pruning'	8	15
Avoiding injuries when using a chainsaw	27	2
Avoiding injuries when on the skid site	24	3
Avoiding felling injuries	24	3
Avoiding injuries when planting and releasing	8	15

Card storage

Some respondents had lost their cards (4) or kept them at home (5) but the majority reported that their cards were still at work. Many have made the cards available for crew use - typically stored in the smoko room (6), held by the crew safety rep (1), in a training folder (4) or filing cabinet (5). Replies to an earlier question indicated that two respondents had thrown theirs out.

Where do you keep these cards?	Yes	No
At home	5	1
At work <ul style="list-style-type: none"> - in a training folder - in a filing cabinet - in my vehicle (e.g. glove box) - with my work tools - in the smoko room 	7 4 5 2 5 6	
I've lost them	4	
I threw them out		
Other <i>(please describe)</i>		

Card development

Overall, respondents were happy with the design and any dissatisfaction concerned size and density of information. Further ideas for development concerned the generation of a larger poster that can be wall mounted (1), bolder headlines for the contact details / web address (1), emphasis on "plain English" of = 2/3 sentences (1), and possible addition of an 0800 number (2) (although there was also uncertainty concerning actual uptake of such a service). The idea of launching a new card every now & then (to re-generate interest) was also suggested (1), as was increasing availability (1) and targeted rather than indiscriminate distribution (1).

Respondents were enthusiastic about further use of motivating aspects (18). The competition was seen as popular, with the t-shirts and chain-saw each perceived as a desirable prize. The idea of offering a non-work related prize (such as a fishing rod) was also suggested (1). The desire for materials to use in safety meetings or as a 30-45 minute quiz or exercise (perhaps on a wet day) was also noted.

If more mini-HaPS cards were developed what should be included?	Yes	No
Different styles / layout	2	11
More contact details for help	8	6
More motivating aspects (e.g. competitions and quizzes)	18	2
More hazard types	20	2
What information do you want more of in the future <i>(please describe)</i>		

There was widespread enthusiasm for a more extensive range of hazards to be addressed in future (20). Where 'more hazard type' ideas were offered these concerned both general developments and targeting of specific hazard types. Comments concerning general development opportunities included using fatality and incident data to identify high risk activities (2), going across the board to other areas in forestry (silviculture, clearfell etc) (2) or to associated activities such as pulp and paper manufacturing activities (1).

There was also enthusiasm for more cards concerning a wider range of harvesting/ logging activities (3), including skid work (1), breaking out (3), more on chainsaw felling (1), driving on forestry roads (including use of radio-telephone) (4), use of machinery such as loaders, excavators, dozers, skidders, haulers, and diggers with grapples (5), and machinery maintenance (1).

Respondents also commented on the need for guidance on hazards that can affect everyone in the industry, such as hydration, nutrition & individual control of factors that impair performance (5), use and maintenance of PPE (1), the hazard identification process (1), drugs & alcohol (1), walking & navigating poor terrain (1) and protection from the elements / environment (1).

Conclusions

The survey provided a wide range of useful feedback that can be used in future mini-HaPS card developments, including both content and methodological approaches. Although not anticipated, the gains made through combined use of both postal and telephone data collection methods may also be adopted for any similar future evaluations. Responses were gathered from those undertaking a wide range of harvesting roles and responsibilities, showing that the cards have been distributed and used at all levels - for personal use or as a training medium. Whilst there were concerns that the content was too basic for more experienced staff the mini-HaPS cards did introduce interest and ideas for future development among recipients.

- The use of competitions and prizes is welcomed, but a wider range of entrance opportunities are required. This should permit entry by subsequent recipients (the end users) & not just those on first receipt of the mini-HaPS cards
- The target audience for mini-HaPS cards needs to be made clearer. Whilst key messages may be appropriate for those at all levels, they need to be appropriately combined with information that will stimulate interest among the target group
- Potential conflict or contradiction with material distributed in Unit Standards needs deeper exploration
- There appears to be a need for 'training materials' (such as 'toolbox talks') that can be used within crews -at induction, safety meetings or when rained off, for example. The ideas of 'slowly filtering new information to the sector', the development of 'question and answer quizzes' and targeted circulation of specific information to those with specific roles (rather than indiscriminate postage of all available information) warrants deeper exploration.
- The combined production of both pocket cards and duplicates in 'poster' size warrant a trial. The poster should have larger text / cartoons and be suitable for wall mounting. The presentation, perceived value, and anticipated use of 'contacts details for help' warrants review.
- A number of other work types, work related hazards, individual behaviours and data analysis methods have been mooted for inclusion when developing more cards in the future. This should be explored further with industry.

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