



Evaluation of the effectiveness of disseminating workplace health promotion resources to businesses

Report

A collaboration project between:

Nepean Blue Mountains and Western Sydney Local Health Districts

Heart Foundation

Cancer Council NSW

Prevention Research Collaboration, University of Sydney

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Executive Summary

Encouraging workplaces to undertake health promotion is a significant component of the National Partnership Agreement on Preventive Health. However, little is known of the types of information small and medium size workplaces would find useful. Two resources on workplace health promotion were mailed to 213 workplaces in Parramatta and Lithgow. The resources provided information on the benefits of workplace health promotion, suggestions for low-cost activities and components of a sustainable program.

Workplaces were contacted 4 weeks after receiving the resources to obtain their response. Response rate was 29%, with majority (84%) of respondents being small workplaces (< 20 employees). 62% of respondents rated the resources as either 'very useful' or 'somewhat useful'. Workplaces in 'contemplation' and 'preparation' stages of change for engaging in WHP were most likely to have undertaken an activity to support the health and well-being of employees or be intending to, as a result of reading the resources.

The findings of this study provide useful information on the reach and impact of dissemination of health promotion resources by mail to workplaces, and particularly small businesses. In this sample, approximately two thirds of workplaces recalled receiving the resources, just under half had read one or both resources, and twenty percent reported that they implemented or were intending to implement a WHP activity or change in their workplace as a result of receiving the resources. The dissemination had only modest impact; however, resources disseminated in the context of larger scale strategies, such as media campaigns promoting the benefits of workplace health promotion to employers, may have a greater impact.

Background

Workplaces are potentially an important setting for promoting health and implementing interventions for the prevention of chronic disease. In Australia, as part of the National Partnership Agreement on Preventive Health, each State and Territory government has received funding to undertake health promotion initiatives in workplaces. Some states have previously undertaken work in this area; however, in NSW the implementation of the Healthy Workers Initiative will be the first large scale approach targeting workplaces. While health communication is an important tool for enhancing health knowledge, motivation and skills¹, little is known of the types of resources and support workplaces use, or perceive to be useful.

In order to collect information on the nature and extent of current workplace health promotion (WHP) activities and the types of support and information businesses perceive to be useful, a survey was conducted in 2011 in workplaces in Parramatta and Lithgow local government areas by the Prevention Research Collaboration, The University of Sydney and the Nepean Blue Mountains and Western Sydney Local Health Districts (NBM & WS LHDs). A total of 38% of workplaces indicated that a toolkit consisting of a guide providing information on implementing workplace health promotion (WHP) and suggestions for activities would be useful.

In fact, informational resources are a common component of workplace health promotion programs², and in 2011, Heart Foundation NSW, Cancer Council NSW and the Physical Activity, Nutrition and Obesity Research Group (PANORG) from The University of Sydney identified the lack of simple resources that were applicable to the NSW context. They developed two evidence-based resources: *'The Healthy Workplace Guide: Ten Steps to Implementing a Workplace Health Program'*, in the form of a 32 page booklet, and *'Healthy Workplace Activities: At a Glance'*, a 4 page brochure^{3,4}. The resources are available online from www.cancercouncil.com.au and www.heartfoundation.org.au. A brief description of the resources is provided in Figure 1.

Figure 1. Description of the two workplace health promotion resources

The ***'Healthy Workers Guide: Ten Steps to Implementing a Workplace Health Program'*** provides information on developing, implementing and evaluating a workplace health program and/or activities. It has checklists in each section and a comprehensive tools and resources section. It aims to assist small and medium businesses with limited resources to implement a cost-effective workplace health program.

The ***'Healthy Workplace Activities: At a Glance'*** contains a list of practical suggestions for activities targeting physical activity and nutrition in the workplace, as well as links to additional services in other health areas.

As part of the development process, the presentation, format and content of the '*Healthy Workplace Guide: Ten Steps to Implementing a Workplace Health Program*' was tested in a small convenience sample of 15 workplaces. The majority of workplaces said that they found the guide very useful and reported that it increased their knowledge regarding workplace health activities and programs. However, this was a sample of workplaces that may already have had a high level of interest in workplace health promotion. The aim of the current study was to assess the reach and impact of a simple dissemination strategy of mailing these two workplace health promotion resources to a large sample of workplaces from a diverse range of industries. The specific aims were as follows:

- i) To determine the recall and awareness of receiving mailed resources by workplaces in a metropolitan and non-metropolitan region.
- ii) To determine the proportion of workplaces reading the resources.
- iii) To assess the perceived usefulness of the resources.
- iv) To assess the extent to which the resources prompted workplaces to undertake activities for employees.

Methods

As depicted in Figure 2, the resources were mailed to 213 workplaces (65 in Lithgow and 148 in Parramatta) of which approximately 71% were small workplaces (<20 employees), 23% were medium size (20-199 employees) and 6% were large (≥ 200 employees). These workplaces had previously participated in a survey on workplace health promotion, as noted above (results published elsewhere). Workplaces were mailed the two resources, along with a letter of introduction describing the purpose of the study (Week 1). At 4 weeks, workplaces were mailed a survey which collected information on the perceived usefulness of the resources and whether they had undertaken, or intended to undertake, health promotion activities in their workplace as a result of reading them. The survey could be completed on paper or online. An incentive, in the form of a fruit box delivered to the business, was offered for completing the survey. A reminder survey was mailed at 6 weeks to non-responders. Follow-up phone calls were made to a random sample of non-responders ($n=70$) at 7-8 weeks to enhance the response rate.

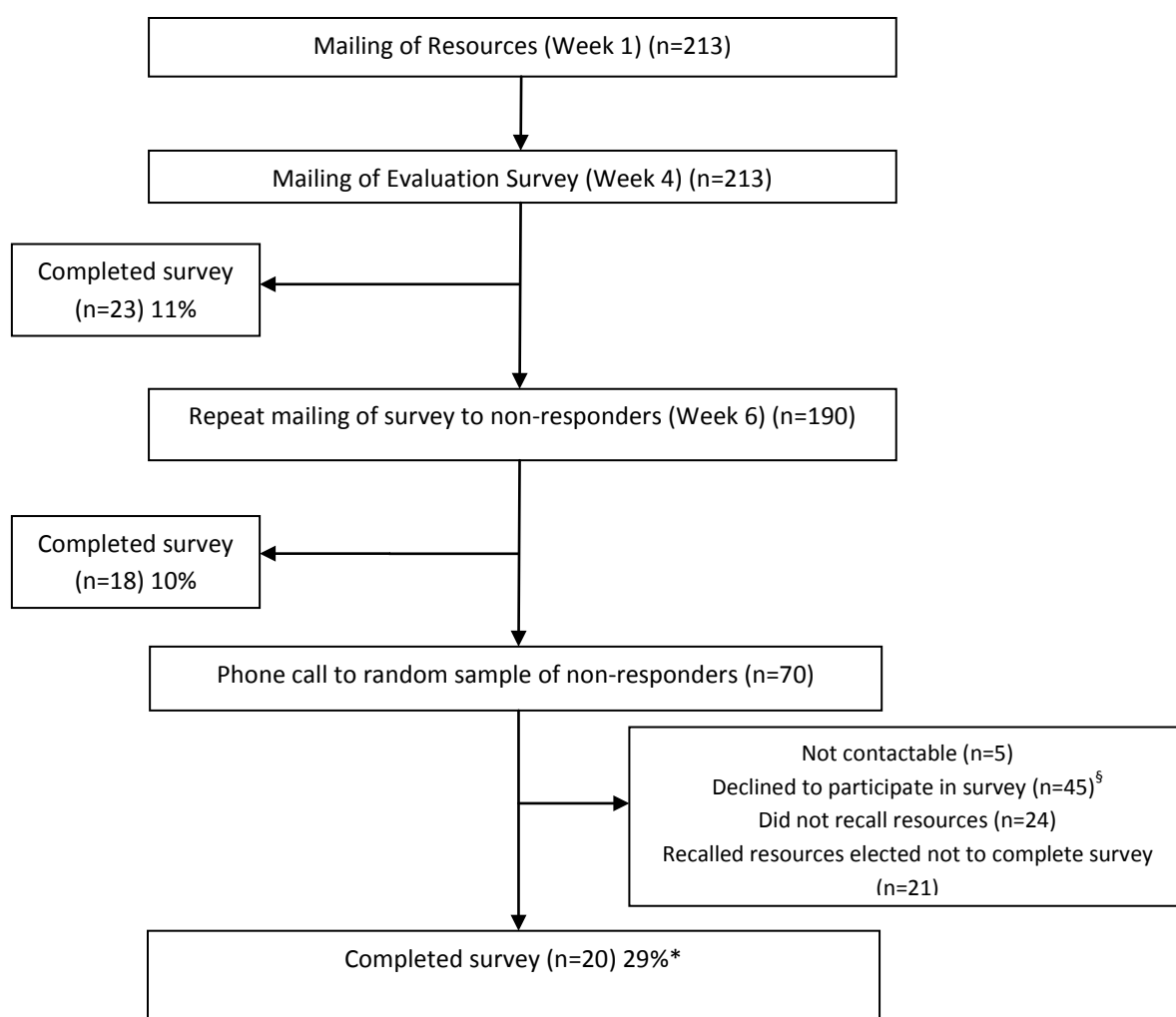
The project was supported by the Lithgow and Parramatta City Councils. Ethics approval was obtained from The University of Sydney Human Ethics Committee.

Results

Response Rates

- 61 workplaces participated in the survey (44 on paper, 7 online and 11 via telephone).
- Overall response rate was 29% (61/213), and was similar for Lithgow (26%, 17/65) and Parramatta (30%, 44/148).
- The response rate was highest when workplaces were contacted by telephone (Figure 2).

Figure 2. Study Flow Diagram – Evaluation of the dissemination of workplace health promotion (WHP) resources to businesses in Parramatta and Lithgow



*The response rate in those workplaces where contact was made was 31% (20/65).

§Of the 45 workplaces contacted by phone and refusing to participate in the survey, only 21 recalled receiving the resources.

Description of survey respondents

- The majority of workplaces participating in the survey were small businesses (< 20 employees) (84%, 51/61), with 5 medium (20-199 employees) and 5 large (200+ employees) businesses also completing the survey.
- Just over half of respondent businesses were from the service industry sector, and fewer than 10% were from the production sector.
- Of those representatives who completed the survey, 73% (40/55) reported having the main responsibility for employee health and wellbeing. Of these, almost half were owners (44%), 22% were general managers, approximately 5% were occupational health and safety managers, and 29% were 'other'.

Priority of workplace health promotion (n=50)

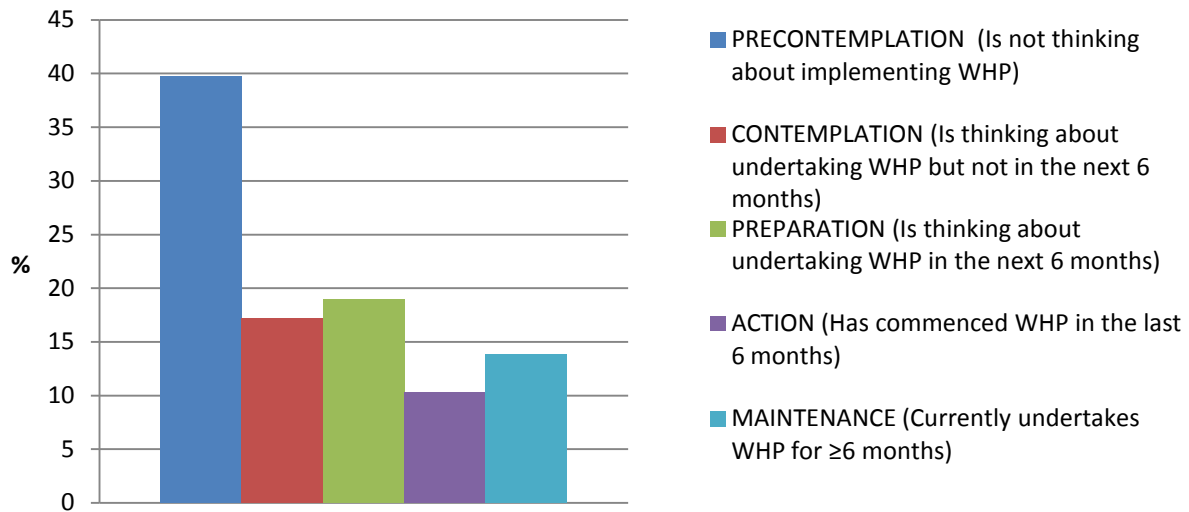
- 42% of respondents reported their business placed a 'high' or 'very high' priority on WHP, while 42% and 16% placed a 'moderate' and 'low/none' priority, respectively.
- Workplaces placing a 'high' or 'very high' priority were more likely to be undertaking workplace health promotion activities (66% versus 33%, $p < .016$).

Current workplace health promotion and stage of change (n=58)

Figure 3 shows the stage of change for workplace health promotion as reported by survey respondents.

- Only 24% of workplaces completing the survey were currently undertaking workplace health promotion (80% of large workplaces, 40% of medium size and 17% of small workplaces).
- Of those workplaces not undertaking WHP, half (23/44) were not contemplating undertaking workplace health promotion.

Figure 3. Stage of change for workplace health promotion (WHP)* for businesses participating in the resources evaluation survey



*Defined in the survey as activities in the workplace to support the health and well-being of employees

Figure 4. Stages of change for undertaking workplace health promotion

PRECONTEMPLATION: NOT thinking about implementing health & well-being activities

CONTEMPLATION: Thinking about implementing health & well-being activities but not in the next 6 months

PREPARATION: Thinking about implementing health & well-being activities in the next 6 months

ACTION: Has started to implement health & well-being activities in the last 6 months

MAINTENANCE: Currently undertakes health & well-being activities and has been doing so for more than 6 months

Recall and Reading of the Resources

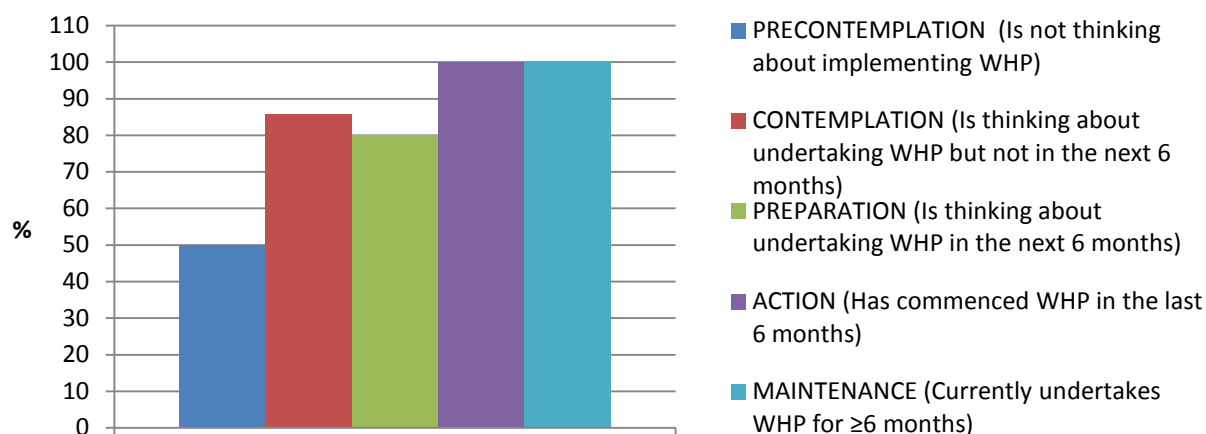
Proportion of workplaces recalling receiving and reading resources (n=61)

- Of those completing the survey 69% (42/61) recalled receiving the resources. There were no differences by industry sector or perceived priority of workplace health promotion.
- Of the 65 workplaces able to be contacted by telephone, 39 could recall receiving the resources (60%).
- 28 workplace respondents reported that they had read one or both resources – 46% (28/61) of all those responding to the survey and 67% (28/42) of those who responded to the survey had recalled receiving the resources.
- For those reporting that they read one of the resources, 75% (21/28) read both and 25% (7/28) read only the *'Healthy Workplace Activities: At a Glance'* brochure.
- A lack of time was cited as the most common reason for not reading either resource.

Characteristics of workplaces reading the resources (n=61)

- The proportion of workplaces reading the resources was lowest in those in 'Pre-contemplation' stage for undertaking workplace health promotion, and highest for the those in the 'Action' or 'Maintenance' stage of change (Figure 5).
- Workplaces that had rated a 'workplace health toolkit' as 'very' or 'somewhat' useful in the previous WHP survey (2011) were more likely to have read the resources (76% versus 20%; $p=0.018$).
- Workplaces that either 'strongly' or 'somewhat' agreed that promoting the health and well-being of employees is an important investment for a business in the 2011 survey were more likely to have read the resources (81% versus 44%; $p=0.038$).
- There were no differences in the proportion reading the resource by industry sector or current priority of workplace health promotion.

Figure 5. Proportion of workplaces reading resources by stage of change for Workplace Health Promotion (WHP)

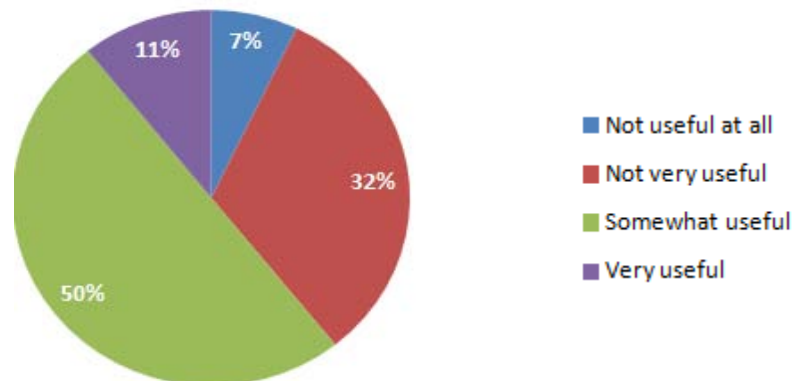


Perceived Usefulness of the Resources

Perceived usefulness of the *'Healthy Workplace Activities: At a Glance'* brochure (n=28)

- 61% of respondents who read the *'Healthy Workplace Activities: At a Glance'* brochure rated it as 'very useful' or 'somewhat useful', and 39% rated the brochure as 'not very useful' or 'not useful at all' (Figure 6).
- Workplaces already undertaking workplace health promotion were more likely to rate the *'Workplace Health Activities: At a Glance'* brochure as 'very' or 'somewhat' useful compared to workplaces that were not (89% versus 47%, $p=0.042$).
- There were no differences by industry sector, current priority of WHP or perceived value of WHP.
- There were no differences in usefulness of the resources by current priority of WHP or perceived value of WHP or by size or industry.

Figure 6. Ratings of usefulness of the *'Healthy Workplace Activities: At a Glance'* brochure

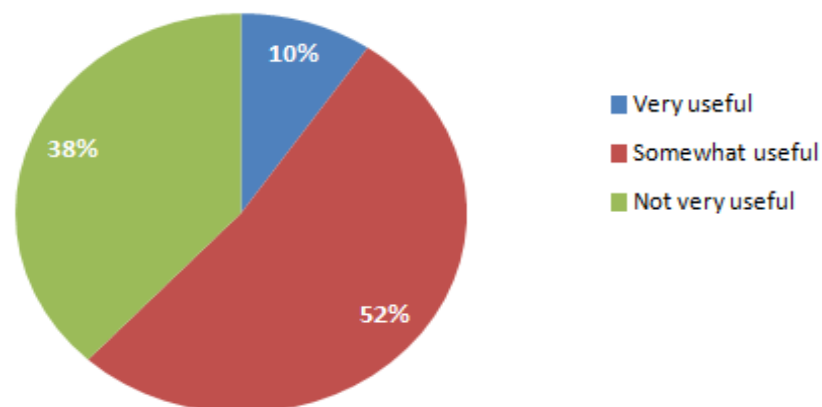


In response to the open-ended question on what ways they perceived the brochure to be useful, the most common responses were that the brochure provided simple and interesting information and ideas for activities to promote staff health and well-being. Several respondents reported that it was a reminder of thinking about employees, healthy workplace and work life balance. Others considered the brochure useful as a reference for WHP activities.

Perceived usefulness of the ‘Healthy Workplace Guide: Ten Steps to Implementing a Workplace Health Program’ 32 page booklet (n=22)

- 62% reported the 32 page booklet ‘very useful’ or ‘somewhat useful’, while 38% reported the booklet to be ‘not very useful’ (Figure 7).
- Those workplaces in ‘Contemplation’, ‘Preparation’ or ‘Action’ (90%) stages of change were most likely to rate this booklet as ‘somewhat’ or ‘very useful’, compared to those in ‘Precontemplation’ (40%) and ‘Maintenance’ (33%) stages (p=0.040).
- Workplaces that ‘strongly agreed’ or ‘agreed’ that workplace health was an important investment to make were more likely to rate this booklet as ‘very useful’ or ‘somewhat useful’ compared to workplaces that did not (73% versus 0%; p=0.017).
- There was no difference by current priority of WHP.

Figure 7. Ratings of usefulness of the ‘Healthy Workplace Guide: Ten Steps to Implementing a Workplace Health Program’ booklet



Responses to an open-ended question on what ways they perceived the 32 page brochure to be useful included the following:

- The easy ideas and concepts were viewed as a positive aspect of the resource.
- Several workplaces reported that the checklists were of value.
- Others reported the brochure was useful as a reference document.
- Reinforcement of current activities.
- The tools and resources section was seen as a useful component of the guide.

Impact on workplace health promotion – action and intention

Impact of reading resources on action or intention to undertake workplace health promotion activities

Activities

- Overall, 46% (16/35) of workplaces that read one or both resources reported they had either implemented, or intended to implement, workplace health promotion activities as a result of reading the resources.
- A further five workplaces reported they did not take action and were not intending to as a result of receiving the resources as they were already undertaking WHP (n=5).
- 26% (10/38) of workplaces that read the resources also reported that they **had already** undertaken a workplace health promotion activity or change in their workplace as a result of reading the resource.
- 34% (12/35) of workplaces reported they were **intending** to undertake a workplace health promotion activity or change in their workplace as a result of reading the resource.
- In response to an open question, increasing healthy eating practices was the most commonly implemented activity, with several respondents reporting that they had provided access to fruits and vegetables at the workplace and tips on healthy eating habits to staff.

Organisational support

A variety of additional responses were provided as changes that respondents had made or were intending to make including:

- I. *organisational support* (e.g. flexible working schedules, discussions with department heads on WHP and encouraging health checks),
- II. *incentives* (e.g. subsidising gym memberships and paying for staff participation in fun runs), and
- III. *social support* (e.g. organising walking groups and encouraging regular breaks during busy periods at work).

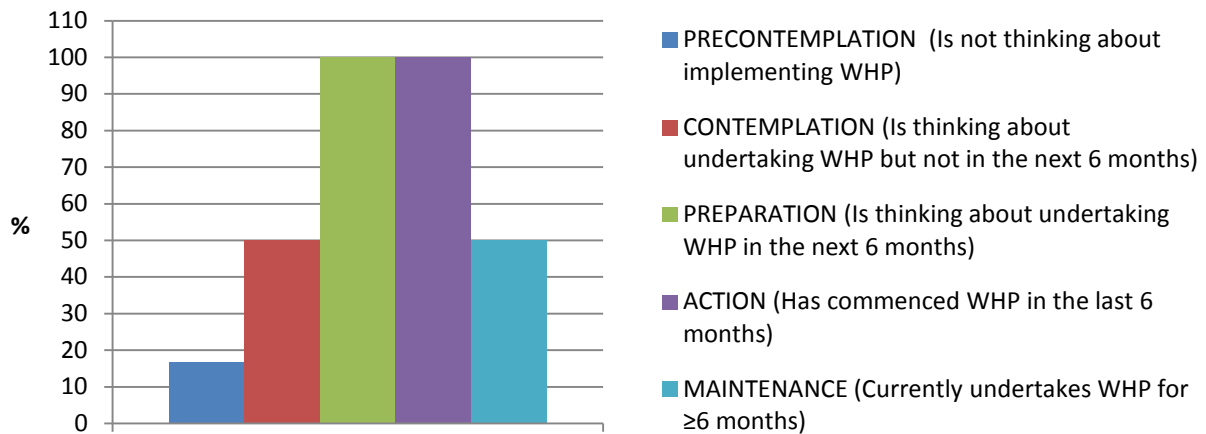
Respondents were asked if reading the ‘*Healthy Workplace Guide: Ten Steps to Implementing a Workplace Health Program*’ would change their intention to implement specific organisational support for workplace health promotion.

- 32% (7/22) reported they **would** consider introducing a structured program, 27% (6/22) nominated an allocated budget, 27% (6/22) for having an employee responsible for coordinating activities and 14% (3/22) for a health and wellness committee.
- 41% (9/22) reported they **would** consider introducing goals or mission statement related to health and wellbeing of employees and 45% (10/22) would consider written policies on employee health and wellbeing.

Characteristics of workplaces and the likelihood the resources prompted action or change in intention

- Workplaces that 'strongly agreed' or 'agreed' that workplace health promotion was an important investment to make were more likely to undertake activities, or be intending to, as a result of receiving the resources (78% versus 35%; $p=0.033$).
- There were significant differences in whether workplaces undertook or were intending to undertake WHP activities, based on their stage of change for workplace health ($p=0.010$) with those in 'contemplation' and 'preparation' stages most likely to have undertaken an WHP or be intending to, as a result of reading the resources (Figure 8).

Figure 8. Proportion of respondents undertaking change or intending to as a result of reading the resources by stage of change



Impact on knowledge and attitudes

- 41% of respondents 'strongly agreed' the 4 page brochure increased their knowledge of the benefits of a healthy workplace and 38% 'somewhat agreed'.
- 41% of respondents 'strongly agreed' the 32 page brochure increased their knowledge of the benefits of a healthy workplace and 32% 'somewhat agreed'.
- Close to two thirds of respondents 'strongly' or 'somewhat' agreed the resources increased their knowledge of specific activities to undertake (65%).
- 77% 'strongly' or 'somewhat' agreed that the '*Healthy Workplace Guide: Ten Steps to Implementing a Workplace Health Program*' increased their knowledge of how to implement a workplace health program.

Costs of mail dissemination

- The cost per workplace of mailing both resources was \$2.76 per workplace (this did not include the development costs of the resources).
- Mailing the 4 page brochure alone would have cost \$2.18 per workplace.

Table 1. Costs of implementing the mail out of resources

Item	Unit Cost	#	Total
Printing 32 page booklet	.58	213	\$123.54
Printing 4 page brochure	.34	213	\$72.42
Mailing Cost	1.74	213	\$370.62
Printing of accompanying Letter	.10	213	\$21.30
Cost per workplace	\$2.76	Total Cost	\$587.88

Discussion

The findings of this study provide useful information on the reach and impact of mail dissemination of health promotion resources to workplaces. In this sample of respondents, approximately two thirds of workplaces recalled receiving the resources, just under half had read one or both resources, and twenty percent implemented or were intending to implement a WHP activity or change in their workplace as a result of receiving the resources.

Workplaces not contemplating workplace health promotion ('precontemplation' stage of change) were least likely to have read the resources, and least likely to undertake or indicate an intention to undertake a WHP activity or change. However, 50% of those in 'precontemplation' stage did read one or both resources, and the majority (>75%) of these reported that it increased their knowledge of the benefits of a healthy workplace; therefore, there is some suggestion that the resources may have had an impact on awareness in those not previously considering WHP.

The majority of workplaces perceived both resources as useful, predominantly as reference documents for communicating to staff, raising awareness and reinforcing current endeavours. Workplaces already undertaking activities were most likely to rate the resources as very useful; however, half of those workplaces not thinking about undertaking WHP also found the resources useful. While the proportion of workplaces rating the resources as useful was similar for the short and long versions, there were differential responses according to respondents' stage of change. The 4 page brochure was perceived to be useful, irrespective of the stage of change the workplace was in for WHP. This was in contrast to the 32 page booklet: workplaces not considering undertaking WHP and those who were already undertaking (for longer than six months) were less likely to perceive this resource as useful, compared to those contemplating, preparing to, or commencing WHP.

The main reason reported for not reading the resources was lack of time. This may reflect the priority given to WHP at the time the resources arrived. Given the materials arrived unexpectedly, with no contextual campaign or government policy announcement, it is not surprising that some workplaces did not engage with them. While mailing health information is a low cost method of providing businesses with workplace specific information, the reach and impact would be enhanced if supported by informational campaigns and other communication strategies that raise awareness of the benefits of health promotion for workplaces⁵. Another strategy would be to include the resources as part of a larger program, for example engaging workplaces in physical activity or nutrition challenges and providing the resources during the challenge to encourage further activities and changes in the workplace².

In the previous workplace health survey, in which the workplaces in the current study participated, a toolkit with information on how to implement activities and programs rated highly as a preferred form of support for implementing WHP. Those workplaces which had previously indicated they perceived a toolkit to be useful were in fact more likely to read the resources and rate them as useful.

The mailing of resources to workplaces was a moderately cost-effective approach for reaching workplaces, raising awareness of the benefits of workplace health and prompting action. Whilst the cost of mailing both resources per workplace is quite low (<\$3 per workplace), it would not be advisable to mail both resources to all workplaces in NSW, as there are approximately 300,000⁶. Because the 4 page brochure was deemed useful by workplaces irrespective of their current level of workplace health promotion activity, the brochure is suitable for proactive mailing on a large scale, in terms of both responses and costs (~\$2 per workplace). In contrast, the 32 page booklet was less likely than the brochure to be read and was not likely to be rated useful by small workplaces not considering workplace health promotion.

A strength of this study is the high proportion (84%) of small workplaces (<20 employees) in the sample, which is similar to the large proportion of small workplaces in NSW (91%)⁶. A limitation is the response rate of 29%; however, evidence indicates that response rates at the organisational level, where respondents are senior managers representing an organisation, are typically lower than in studies conducted at the individual level (e.g. employees, general population) (36% versus 53%)^{7,8}.

Conclusion

Education and health communication is an important component of health promotion and the prevention of chronic disease⁹. Yet little is known of the types of information workplaces actually do use and the best method of communicating with and reaching workplaces. This study provides important insights on the effectiveness of mailing health promotion resources to workplaces, and increases understanding of resources employers find useful and whether they prompt action. The resources were useful in raising awareness of the benefits of WHP and prompting action; however, the usefulness of the resources would be enhanced if they were actively sought by workplaces at the time when they were required. This would then require the resources to be disseminated in the context of other, larger scale strategies, such as media campaigns, that encouraged employers to consider WHP and incentive or award programs for workplace health promotion.

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