

Staying Healthy:

Industry organisations' influence on behaviours and services used by fishers



Tanya King, Sue Kilpatrick and Karen Willis

March 2014

FRDC Project No 2012/402

© 2014 Fisheries Research and Development Corporation.

All rights reserved.

ISBN 978-1-74156-190-6

Staying Healthy: Industry organisations' influence on behaviours and services used by fishers

FRDC Project No 2012/402

Ownership of Intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Fisheries Research and Development Corporation, Deakin University, University of Tasmania and University of Sydney.

This publication (and any information sourced from it) should be attributed to:

King, T., Kilpatrick, S., and Willis, K. *Staying Healthy: Industry organisations' influence on behaviours and services used by fishers*. Report to the Fisheries Research and Development Corporation Project No. 2012/402. Deakin University, University of Tasmania and University of Sydney. 2014. Canberra, April. CC BY 3.0

Published by Deakin University

Creative Commons licence

All material in this publication is licensed under a Creative Commons Attribution 3.0 Australia Licence, save for content supplied by third parties, logos and the Commonwealth Coat of Arms.



Creative Commons Attribution 3.0 Australia Licence is a standard form licence agreement that allows you to copy, distribute, transmit and adapt this publication provided you attribute the work. A summary of the licence terms is available from creativecommons.org/licenses/by/3.0/au/deed.en. The full licence terms are available from creativecommons.org/licenses/by/3.0/au/legalcode.

Inquiries regarding the licence and any use of this document should be sent to: frdc@frdc.gov.au.

Disclaimer

The authors do not warrant that the information in this document is free from errors or omissions. The authors do not accept any form of liability, be it contractual, tortious, or otherwise, for the contents of this document or for any consequences arising from its use or any reliance placed upon it. The information, opinions and advice contained in this document may not relate, or be relevant, to a reader's particular circumstances. Opinions expressed by the authors are the individual opinions expressed by those persons and are not necessarily those of the publisher, research provider or the FRDC.

The Fisheries Research and Development Corporation plans, invests in and manages fisheries research and development throughout Australia. It is a statutory authority within the portfolio of the federal Minister for Agriculture, Fisheries and Forestry, jointly funded by the Australian Government and the fishing industry.

Researcher Contact Details

Name: Dr Tanya King
Address: Alfred Deakin Research Institute
Deakin University, Geelong, VIC 3220
Phone: 03 52272149
Fax: 03 5227 3380
Email: tanya.king@deakin.edu.au

FRDC Contact Details

Address: 25 Geils Court
Deakin ACT 2600
Phone: 02 6285 0400
Fax: 02 6285 0499
Email: frdc@frdc.com.au
Web: www.frdc.com.au

In submitting this report, the researcher has agreed to FRDC publishing this material in its edited form.

Foreword

A healthy workforce is critical for workforce participation and productivity. This study points the way to a healthier fishing community that facilitates greater productivity, more reliable and resilient human capital, fewer illnesses and a more efficient industry. This research involved identifying existing and potential roles for industry organisations in enhancing health and well-being. The results are of interest to the fishing industry, their community and organisations, local health-care providers, fisheries managers and policy makers at all levels.

This project, *Staying Healthy: Industry organisations' influence on behaviours and services used by fishers* grew out of a need identified in earlier research that indicated fishers were less likely than farmers to prioritise their health and well-being, and that fisher industry organisations were, relative to those of farmers, less likely to influence behaviours and services used by fishers.

The results of the project confirm that fishers, as a collective, acknowledge physical health and injury are concerns. However mental health issues were identified as a more pervasive threat to fishers and their families. This is recognised by industry organisations, but there is a limited capacity to address the causes of mental health issues, due to the institutionalised nature of stressors (e.g. concession insecurity). Further, it was identified that fishing industry organisations are limited in their influence on the general health and well-being behaviours of fishers, and the services they seek. While some were pro-active, the majority of efforts were 'ad hoc' and initiated by individual, influential women in the community.

The study recommends that:

- fishing industry bodies encourage fishers to seek treatment for mental as well as physical health symptoms;
- health practitioners and service providers better tailor health services to the specific health needs, and irregular working patterns, of fishers;
- research, policy and mental health strategies should be differentiated from those developed for farmers, due to the very different nature of their capital investment security;
- inherent uncertainty in current licencing and quota provision arrangements, and the Workplace Health and Safety threats these pose to fishers and their communities, be acknowledged and addressed by policy makers.

Contents

Acknowledgments.....	vi
Abbreviations.....	vii
Keywords	viii
Executive Summary	ix
Introduction	1
Background to the project.....	1
Background literature.....	2
Methods	7
Aims of the study	7
Design	7
Project reference group	7
Study sites	7
Interview and group discussion participants	8
Site liaison assistants	8
Data collection	8
Interviews and group discussions.....	9
Health service data	9
Data analysis.....	9
Results.....	11
Introduction.....	11
Physical health	11
Environmental health risks	11
Lifestyle risk factors	12
Long term physical health risks.....	13
Mental Health.....	14
‘Traditional risks’ in fishing.....	14

'Modern uncertainties' in fishing	16
Conflict with recreational fishers	20
Health seeking behaviour	21
Use of health care services	21
Barriers to health care use	23
Agency	24
Flexible services and soft entry points	26
Industry actions	28
Women in action	30
Health plans	31
Health tool-kits.....	32
Discussion	35
Conclusion	37
Implications.....	38
Recommendations.....	39
Further development	41
Appendix 1 Statement and Consent form	42
Appendix 2 Project materials – Health plans	46
Appendix 3 Project materials – Health tool-kit Western Port and Port Phillip Bays.....	54
Appendix 4 Project materials – Health tool-kit Lakes Entrance	67
References	75

Acknowledgments

The project team would like to thank the Fisheries Research and Development Corporation for providing funding and support for this study. We would also like to acknowledge the input of the project reference group who assisted in site selection, provided information and will play an important role in disseminating the study findings. In particular we would like to acknowledge the project Reference Group:

- Kate Brooks (FRDC Social Science Research Co-ordination Programme Manager)
- Neil MacGuffie (Research Officer, Western Australian Fishing Industry Council -WAFIC)
- Maria Manias (Executive Officer of Victorian Fishery Association into Resource Management – VFARM)
- Ashley Oliver (Communications Manager, Seafood Industry Victoria -SIV).
- Eric Perez (former Executive Officer, Queensland Seafood Industry Association - QSIA)

We acknowledge the assistance of the three Research Assistants who worked on this project: Murray Noonan, who arranged interviews and contact with industry representatives, Christopher Speldewinde who contributed to the review of background literature and Daniel Terry who assisted in compilation of this report. We thank our three Local site liaison assistants, Mary Ash, Joy SeEVERS and Maria Manias. Special extra thanks go to Maria who has been a strong supporter of the project from the time the funding application was developed.

Most importantly, we gratefully acknowledge the valuable contributions of the many fishers and industry representatives who participated in the research.

Abbreviations

AFMA	Australian Fisheries Management Authority
DAFF	Department of Agriculture, Fisheries and Forestry
EPBC	Environmental Protection and Biodiversity Conservation
FRDC	Fisheries Research and Development Corporation
OH&S	Occupational Health and Safety (now termed WHS)
RIRDC	Rural Industries Research and Development Corporation
SIV	Seafood Industry Victoria
VFARM	Victorian Fishery Association into Resource Management
WAFIC	Western Australian Fishing Industry Council
WHS	Work Health and Safety (formerly termed OH&S)
WINSC	Women's Industry Network Seafood Community

Nomenclature

- We acknowledge that sometimes those who fish, both male and female, are referred to colloquially as 'fishermen'. As this report is intended for a broader audience we refer to these people according to the general term, 'fishers'.
- References to 'industry' may refer to either a non-funded fisheries organisation, such as the VFARM, government funded industry bodies such as WAFIC or SIV, or a community of practice who may or may not come together in a formal sense. Throughout the report we will distinguish between these different groupings as we present information in a relevant context.

Keywords

- Fishers
- Industry bodies
- Soft entry points
- Mental health
- Conflict with recreational fishers
- Fishing licence
- Health and well-being
- Health services
- Stress
- Physical health
- Property rights
- Quota

Executive Summary

Background to the report

Globally commercial fishers experience high rates of disease, are at high risk of accidents and injuries, and are subject to many physical and mental health challenges. This project investigated the ways in which fishers, community level fisher organisations, peak industry bodies and health providers communicate and plan in relation to health information and service provision. This study emerged in response to a previous report that used a strength-based approach to identify best-practice good-health behaviours in a number of farming and fishing communities, titled *Staying Healthy: Behaviours and services used by farmers and fishers*. This earlier report found there was a need for specific attention to the physical and particularly the mental health of those in the Australian commercial fishing industry. This included a better understanding of the issues, logistical and social barriers to good-health practices, and avenues of health communication and treatment. The 2013 *Staying Healthy* study echoed the Rural Industries Research and Development Corporation (RIRDC) research and development Plan for 2008-2012, *Collaborative Partnership for Farming and Fishing Health and Safety*, which advocated research into health, well-being and resilience in rural primary industries. These reports are coupled with widespread anecdotal accounts describing very poor physical and mental health within the fishing industry, including accounts of suicide and attempted suicide.

As a contributor to a body of scholarly research, this study is supported by other literature, which is addressed, below. In this short section we introduce research that is most relevant to appreciating the findings of this study on fisher health and well-being.

Fishers are particularly susceptible to certain health issues as a result of their occupation. The physical demands of fishing mean that certain types of illnesses and injuries are more likely to occur than others. Government and industry support broad strategies to enhance physical WHS in fishing and other primary industries, though more could be done. To a lesser extent, the mental health issues facing fishers have been acknowledged, though targeted support is lacking.

As with physical health, it is the peculiar nature of commercial fishing that makes fishers particularly susceptible to certain stressors that influence their mental health. Unlike farmers who may own their land, a licence to fish Australian waters is not comparable to private property. Rather, fishers are granted permission to harvest a national resource in exchange for levies. Under the EPBC Act (1999), and State and Commonwealth fisheries Acts, fishing licences may be retracted, fishing grounds closed, and quota reduced to zero, with no notice or compensation. Because of this, fishers and their families operate in an environment of considerable financial and occupational uncertainty. Robust research, outlined on page 22, indicates that there is a causal link between perpetual job insecurity and symptoms of mental

health problems. The data from this study clearly supports the existing research that links a lack of occupational security with evidence of poor mental health.

Aims of the study

The aim of this study was to identify key strategies for industry and fishing community organisations to enhance the health and well-being of the fishing workforce. In particular, the study aimed to:

1. explore how industry supports fisher physical health and mental well-being;
2. develop and trial a set of case-studies and best practice guidelines for industry organisations in enhancing fisher health and well-being in collaboration with industry, fishing communities and health stakeholders; and
3. evaluate the case-studies and best practice guidelines.

Methods

The research design was qualitative, adopting action research methods to enhance the participation of and input from stakeholders. The study employed a mixed method, multi-site case-study approach (two sites in Victoria and one in Western Australia). Fishers, the industry associations, health services and communities all contributed to the project. The empirical evidence for this research is drawn from face-to-face interactions with individuals and group discussions with fishers and other key stakeholders from the commercial fishing industry. These data are supplemented by information from health service providers and Medicare Locals in three case-study sites. Policy analysis and literature reviews contributed to contextualising information gained through interviews and group discussions.

Key findings

Fishing industry organisations are limited in their influence on the health and well-being behaviours of fishers, and the services they seek. While some organisations are pro-active, **the majority of efforts identified in our study were ‘ad hoc’** and initiated by **individual, influential women in the community**. Industry organisations comprised of actual fishers and their families (as opposed to government sponsored liaison bodies, such as Seafood Industry Victoria), experience low recognition and, at times, low cohesion. This limits their capacity to act as facilitators of best-practice health and well-being behaviour and service use.

Actions to influence the health behaviours of fishers are ad-hoc, while health services may be unaware or are not resourced to provide targeted programs.

Some skippers reported being proactive in addressing the causes and treatment of their own, and crew, physical injury. This health behaviour was the result of broader social health messages such as the ‘Slip! Slop! Slap!’ skin cancer prevention campaign, or the general awareness of lifting with ones knees so as to

prevent back

injuries. However, fishers, as a collective, tend to be ‘invisible’ to local health-care providers and tend to present to health services only when their work-schedules allow.

Where service providers are aware of access issues and the need for targeted programs they are, in the main, not resourced to provide these. This is in stark contrast to farmer

health, as farmers are highly visible in the communities in which they live and work and there are a variety of health services and programs to address their health needs.

It is for this reason that the provision of **soft entry points** for fisher health services is vital to improving the health and well-being of fishers. Soft entry points occur when services enter the existing gathering places or everyday environments where people live and work to provide health information or services. For example, health information could be presented in fishing publications and at industry events. This study found that there is a lack of soft entry points available for fishers to access health services.

While physical health and injury concerns were acknowledged, ‘stress’ or mental health issues were found to be pervasive among fishers and extending to the health of families. The causes and manifestations of stress and poor mental health are complex, in the fishing industry as everywhere. This study contributes to the understanding of poor mental health in the fishing industry by clearly identifying – naming – two basic distinctions that emerged

from the data. One of the key outputs of this study is a language that facilitates a more relevant and industry-specific discourse for considering poor mental health in the fishing industry.

The **first distinction** we emphasise for the new language is between the kinds of stressors fishers have always faced as part of their job, ‘traditional risks’, and those that emerge from the tenuous nature of the licences they hold to harvest a common-property resource, ‘modern uncertainties’. Fishers are able to exert a degree of control over the first set of stressors; fisher organisations are able to suggest, model or facilitate best-practice strategies based on evidence and industrial experience. It is in relation to

‘Modern uncertainties’: perpetual occupational and livelihood uncertainty resulting from insecure management arrangements.

The most significant health and well-being issue facing commercial fishers today: Stress, anxiety and depression (often referred to by fishers as ‘mental health’).

‘Traditional risks’: the dangerous nature of fishing, fluctuating market prices, peaks and troughs in catches, breakdowns, etc.

‘traditional risks’ that industry organisations have the greatest opportunity for enhanced health influence, both in the prevention and treatment of the stress caused by the traditional risks of fishing.

Fishers and their organisations are also able to treat the **symptoms** of poor mental

health derived from the insecurity of fishing concessions, or ‘modern uncertainties’. However, fishers have limited capacity to address the actual **causes** of this stress. Herein lies the **second key distinction** we underscore in this report, that between the cause of poor mental health and the effect of poor

‘Modern uncertainties’: perpetual occupational and livelihood uncertainty resulting from insecure management arrangements.

Fishers and their organisations tend to focus on particular **causes** of poor fisher mental health (modern uncertainties), rather than addressing the **symptoms** (stress, anxiety, etc.).

mental health on individual fishers and their families. Scope lies for the expansion of fishing organisation activity into the acknowledgement and promotion of treatment of anxiety caused by ‘modern uncertainties’: the ‘tears and tissues’ approach (Kilpatrick, Willis, Peek, & Johns, 2013b). While fishers are well aware that occupational uncertainty causes them considerable

stress, discussion of the associated health issues focuses almost exclusively on the cause: the insecure management and licencing arrangements themselves. Currently, industry organisations give little targeted attention to addressing the acute symptoms and signs of poor mental health.

Recommendations

- Fisher health issues must be recognised in research, policy and practice separately from farmer health.
- Health service providers should work with industry associations at national, state and local levels to systematically address fisher specific health issues.
- Industry associations must both recognise and address the implications of industry related uncertainty, including stress, rather than exclusively focusing on the causes of the uncertainty.
- Governments should recognise and take steps to address the negative mental health consequences of insecure property rights in fishing, and the inherent WHS dangers to fishers in Australia.

- FRDC should distribute this report to all FRABs with a recommendation that they distribute it to health services in their regions and request that health services implement the report's best practice guidelines for health service and industry organisations to enhance fisher health and well-being.
- Locally produced guidelines and easily accessible health information (eg, health plans and tool-kits) should be implemented and replicated in fishing communities throughout Australia by regional health services in liaison with the local fishing industry. Services that address mental health should be prioritised.

Recommendations for relevant interested parties

For fishers

- Develop and implement a health and well-being maintenance strategy;
- Contribute to a culture in which mental health symptoms are acknowledged and addressed without stigma;
- Be aware of the need to maintain social connections, especially during 'difficult times';
- Continue to provide support or 'mateship' to other fishers who may be experiencing difficulty.

For industry associations

- Incorporate health and well-being items to industry Codes of Conduct;
- Include health check, health program and mental health first aid as part of industry induction, competency certificate and ongoing licensing for operators;
- Proactively draw upon and support women in the fishing industry to help initiate local actions;
- Address local conflict, through
 - increasing public, and particularly recreational fisher, understanding regarding commercial fishing including education and notification for the public, particularly recreational fishers, about the illegality of interfering with commercial fishing boats;
 - providing processes for recreational fishers to notify commercial fishers if inadvertent damage or loss of gear around professional fishing sites, for example the use of 'recreational' tie tags to attach to professional crayfish pots;

For national and state governments and health services

- Develop and deliver health programs, specifically targeting fishers and the fishing industry, which are in addition to standard OH&S safety and includes mental well-being;
- Implement flexible easy-to-access soft entry points, which create self-ownership, such as mobile health vans, industry specific 'fisher health checks' at mainstream industry events, health technology programs or onsite screening days in conjunction with Medicare Locals and industry;
- Identify and involve health care providers with special interest in fishers and fishing activities to work collaboratively with the fishers and industry;
- Facilitate the development of positive relationships between commercial and recreational fishers to reduce poor perceptions of, and conflict between, the parties; and
- Work with industry, financial institutions and fishers to provide financial, social and mental health support to fishers who are experiencing (financial and health) stress due to the low security of fishing concessions (quota and licences).

Introduction

Background to the project

A healthy workforce is critical for workforce participation and productivity. Research shows poor health imposes costs on businesses and industry through absenteeism, risk taking behaviour and poorer productivity (Chudleigh & Simpson, 2009; Goetzel et al., 2010; Kilpatrick et al., 2013b; McDonald, DiBonaventura, & Ullman, 2011; Robroek, Van den Berg, Plat, & Burdorf, 2011; Shaw, Johnson, & Dressler, 2011). International evidence has indicated fishers experience higher rates of disease, are at high risk of accidents and injuries and are subject to many physical and mental health challenges (Binkley, 1995; Heetveld, de Visser, Veerman, Bilo, & van Montfrans, 2001; Johnson, Formichella, Thomas, & Bhaumik, 1998; Kline, Robbins, & Thomas, 1989; Lawrie, Matheson, Ritchie, Murphy, & Bond, 2004; Matheson et al., 2001; Peek, Johns, Kilpatrick, & Willis, 2011; Percin, Akyol, Davas, & Saygi, 2011; Stellman, Boffetta, & Garfinkel, 1988). Furthermore, recent research has found a lack of awareness of occupational health and safety among Australian fishers (Brooks, 2011).

The current research project, *Staying Healthy: Industry organisations' influence on behaviours and services used by fishers* (hereafter *Staying Healthy: fishers*), emerged in response to a number of earlier policies and reports. A National Research Priority (NRP) of the Federal (Labor) Government was 'Promoting and Maintaining Good Health' for the general population. The Rural Industries Research and Development Corporation (RIRDC) report *Collaborative Partnership for Farming and Fishing Health and Safety: Research and Development Plan 2008–2012* (hereafter *Collaborative Partnership Plan*), advocated research into health, well-being and resilience in rural primary industries (Chudleigh & Simpson, 2009). The report highlighted the particular needs of the fishing industry (Chudleigh & Simpson, 2009, p. 12):

With regard to the wild catch industry, the issue of mental health is a priority. There has been very little research conducted into this area, but through contacts with industry peak bodies, the extent of the mental health problems in certain areas of each state are only starting to surface. Anecdotally, the reasons for this are quite different to that of farming.

The particular concern for the health of fishers identified in the Collaborative Partnership Plan was echoed in the (RIRDC) funded project *Staying Healthy: Behaviours and services used by farmers and fishers* (hereafter *Staying Healthy: farmers and fishers*) (Kilpatrick et al., 2013b). It was found that people in the 'fishing industry were least likely to present a positive attitude to health as an underlying health belief, when compared with other industry groups' (Kilpatrick et al., 2013b, p. 11). As a result, the *Guidelines for Best Practice Health and Wellbeing Services and Resources for the Rural Sector* were developed "to present a variety of approaches and scenarios in relation to community health

development, to assist people to develop strategies that are best suited to their own context” (Kilpatrick, Willis, Peek, & Johns, 2013a, p. 4).

The *Staying Healthy: farmers and fishers* report indicated that participants from certain farming industry areas were shown to have benefited from industry involvement in health and well-being, including mental health. Some farmers described significant lifestyle changes after participating in programs that were promoted, sponsored or facilitated by trusted industry organisations (Kilpatrick, Willis, Johns, & Peek, 2012; Kilpatrick et al., 2013b). However, fishers were less likely to report that industry associations had helped them access health and well-being information or programs. Furthermore, the *Staying Healthy: farmers and fishers* report indicated that:

Fishers faced more challenges [than farmers] which impacted on their ability and willingness to access an appropriate range of health and well-being supports. In the fishing industry, continuity of health care was compromised for itinerant workers, and the influence of community culture prevented healthy behaviours, particularly in relation to mental health. (Kilpatrick et al., 2013b, p. xii)

These challenges which fishers experience when accessing health services are indicative of broader health concerns encountered within the industry. Following on from these earlier reports which identified a gap in knowledge about the health behaviours of fishers, the current study explores the role of fishing industry organisations in promoting best-practice health behaviours.

Background literature

Research into Australian fisher health and well-being

Fishers are subject to a multitude of physical and mental health issues due to the environment and risks associated with this type of work (Chudleigh & Simpson, 2009; Kilpatrick et al., 2012; Kilpatrick et al., 2013b). Brooks, in her 2011 report, *Health and Safety in the Australian Fishing Industry*, notes that injuries and accidents in the fishing industry tend to be a result of ‘human error’. While this does not distinguish fishing from other industries subject to similar work health and safety (WHS, formerly termed OH&S) concerns, Brooks notes that there is a cultural acceptance of poor health and safety in the fishing industry that frustrates attempts to improve the health of fishers (Brooks, 2011, p. 14).

Brooks’ report, which focuses on acute injuries rather than chronic conditions, noted an important gap in the statistics on health and safety in the fishing industry. Those fishers who are self-employed as well as those who work for a share of the total catch are not captured in ABS information on the workforce or national OH&S claim data (2011, p. 5). This limits the overall picture we have of health and safety in the fishing Australian fishing industry. Trends or patterns of injury and disease were, however, valuable contributions of the report, which drew information from a range of policy documents.

Despite the limitations of the health and safety data, drowning is by far the most common cause of death in the fishing industry. Other accidents tended to involve machinery, hand-tools, ropes and nets, and were most likely to affect the upper body. According to Brooks (Brooks, 2011, p. 46 original emphasis), ‘the single biggest mechanism of injury in commercial fishing was “Body Stressing”, which refers to “*stress placed on muscles, tendons, ligaments and bones*”’. An increase in the number of OH&S claims relating to mental health since 2006/7 is mentioned, but it is noted that the data rounding conducted in order to protect privacy compromises the veracity of this data (2011, p. 46).

The focus on immediate injuries rather than longer-term ailments is typical of the literature on fishing WHS. International research into fisher health tends to focus on preventative measures pertaining to occupational health and safety (Kucera & Lipscomb, 2010; Mirka, Shin, Kucera, & Loomis, 2005). However, some notable exceptions apply. These include, a lack of sleep and/or irregular sleep patterns and fatigue which are linked with physical health risks, and have been considered a health impediment in the fishing industry, not merely in cases where fishers had ‘fallen asleep at the wheel’ (Allen, Wellens, & Smith, 2010, p. 154). In addition, fishers are subject to high levels of noise, particularly from engine motors. Noise is not only an impediment to deep, restful sleep; it can also lead to hearing impairment and loss.

The impact of alcohol and illicit drug use has been documented within the Western Australian and South Australian fishers cohort (Carruthers, Boots, & Midford, 2002; Evans, Tait, Harvey, & Newbury, 2005) with the finding that the levels of illicit drug use, while at sea or in port, for this group were much higher than the general population. In addition, international evidence suggests that there is a higher than average rate of smoking among fishers (Heetveld et al., 2001; Kline et al., 1989; Lawrie et al., 2004; Percin et al., 2011; Stellman et al., 1988). One of the reasons proffered for the higher smoking rates, is the impact of mental stress faced as an occupational hazard.

Fishers are subject to a multitude of stressors that are inextricably entwined with physical health. For example, Allen et al. (2010) found that issues of mental health, such as worry and anxiety, cause higher levels of accidents and injuries. The causes of stress include external factors such as government policies and co-management challenges, a fluctuating market place and economic concerns (Carruthers et al., 2002), crew cohesion and on-shore social relationships, and lengthy periods at sea coupled with the pressures of working in a ‘dangerous and alien environment’ (Acheson, 1981, p. 276) where accidents, injuries and fatalities are relatively frequent. Other causes of the high levels of stress and anxiety reported among Australian and international commercial fishers include a number of social issues. These stressors compound the more well-documented physical dangers associated with fishing and place pressure on fisher mental well-being, which can then contribute to issues such as smoking and substance abuse, poor eating habits, chronic diseases, and clinically diagnosed anxiety disorders (Acheson, 1981; Dwyer, King, & Minnegal, 2008; Dwyer & Minnegal, 2006b; Murray, Fitzpatrick, & O’Connell, 1997).

High levels of stress and distress among Australian commercial fishers has been documented (Brooks, 2011; Dwyer et al., 2008; Dwyer & Minnegal, 2006a; Kilpatrick et al., 2013b; King, 2005, 2007; Minnegal & Dwyer, 2008b, 2008c; Minnegal, King, Just, & Dwyer, 2003; Palmer, 2003; Professional Fisherman, 2005; Shoebridge, 2004; Smith, Jacob, Jepson, & Israel, 2003). The FRDC funded project, *Identifying, communicating and integrating social considerations into future management concerns in inshore commercial fisheries in Coastal Queensland*, explored the task of integrating social considerations into fisheries management. They noted there was a range of social impacts that influenced fishers, families and communities when regulations pertaining to the commercial fishery alter or were revised by government. They note the impact of government restructuring of the fishing industry on mental health, and suggest they are similar to those following from restructuring in the Australian farming sector.

Despite the recognition by government of the challenges fishers and their families encounter when restructuring of fishing operations occur, the support those individuals and their families receive is very limited in comparison to that of land-based primary producers (Mayhew, 2003; Mitchell et al., 2001; Shaw et al., 2011).

Fishers and farmers in Australian policy:

Australian policy and practice cluster the management of fishing, farming, and some other primary industries. As such, there tends to be a conflation of the health concerns of fishers and farmers (and others), as well as the health and well-being policies designed to combat these issues. Certainly, there are many seemingly obvious overlaps between fishermen and farmers. Both work in the outdoors, are subjected to the elements, and engage in physically demanding work. Both negotiate the vagaries of environmental processes requiring the calculated negotiation of risks that are facilitated by a long-term view of their productivity.

However, one of the reasons fishing requires research and development attention separate from that of farming is that fishing concessions are vastly different assets than the private property of farmers, both in the way they are regarded and subject to government regulation and in the liquid value they have according to financial institutions, a point which is outlined in greater detail in the next section. Thus, there are differences in social and socio-economic concerns, as well as management and health issues, and the risk of grouping fishing in the same category as farming is that these issues may be overlooked in research that is designed in keeping with this broad categorisation.

Fishers face health issues that are specific to their occupation, due to physical demands of the work, the particular social constraints of working around lunar phases rather than with the sun, and the insecure nature of their fishing concessions. Several reports in the last years have indicated a need for a greater

understanding of, including much more accurate baseline statistics, on the employment patterns, health trends and particularly the mental health of commercial fishers (Brooks, 2011; Shaw et al., 2011, p. 96). One of the problems lamented in the *Collaborative Partnership Plan* (Chudleigh & Simpson, 2009, p. 13) was the aggregation of data on fishing and farming safety, coupled with the absence of health and safety records for the large number of fishermen and farmers who are self-employed: ‘Incident data not collected through workers compensation is not available and in the case of the fishing industry close to 75% of industry would be missing’. Despite some encouraging steps towards a targeted mental health research agenda for fisheries, the 2013 update of the government research policy plan, the *Primary Industries Health and Safety Partnership 2013–2017 Plan*, refers to the mental health needs of both fishers and farmers in passing only. The document is much shorter and generally less detailed than the 2008–2012 plan, and contains no mention of the specific need for research and development in fisher mental health. The current study calls for a greater drive for accurate statistics on employment in the fishing industry, as distinct from farming, and for nationwide baseline data on health concerns in the commercial fishing sector, particularly in relation to mental health.

Australian fishing concessions:

Understanding the particular health concerns of Australian fishers requires an understanding of their fishing concessions. While there is an expectation that licences will be reissued by the relevant governing body they are not regarded as private property and may be taken away from fishers. This may happen due to alleged breaches of the licence conditions, or rendered worthless due to the closure of a fishery. Closures can occur as a government response to ecological concerns or due to a collapse in market infrastructure (e.g. processors, buyers), that effectively destroys the fishery as a functional business (as occurred in 2013 with the Victorian scallop industry). The provision of compensation for surrendered licences is not clear. While in some cases it is explicitly stated that it is not allowed because licences are not private property (e.g. the Victorian Fisheries Act), licences have been surrendered in government ‘buy back’ schemes that provide, in practice, monetary compensation in exchange for giving up fishing licences (Dwyer et al., 2008; Minnegal & Dwyer, 2008b). Given the large sums paid by some fishers for licences and the levies paid annually to keep them, the lack of certainty over their liquid value can be distressing for fishers. What is more, financial institutions do not regard the insecure value held in licences to be sufficient collateral for reinvesting in the industry. Thus, fishers wishing to do so must find other assets (e.g. home) to mortgage in order to maintain or grow their businesses.

Quota holdings are also of ambiguous value. Each time the Total Allowable Catch for a species is set, the value of individual quota units (in weight) in that fishery is readjusted to fit the TAC. Therefore, if the TAC is reduced to zero – which is possible even if it is not likely – the value of a fisher’s quota

holding can be reduced to zero. This insecurity is challenging to fishers who wish to make medium to long-term business decisions.

Occupational insecurity and poor mental health:

Research into other industries tells us that uncertainty in relation to one's future capacity to work, and make a living, contributes to poor health outcomes, both physical and particularly mental (Bartley, 2005; Benavides & Delclos, 2005; Butterworth et al., 2011; de Witte, 2005; Klehe, van Vianen, & Zikic, 2012; László et al., 2010; Minnegal & Dwyer, 2008a). When considering the literature on stress and unemployment, it is important to distinguish between the stress of actual job loss, and the perceived threat of redundancy, such as that experienced by the fishers in this study. According to Burgard, Brand, and House (2009, p. 778), the perception of imminent job loss may be more stressful than the reality, because it is not 'socially-visible'. There are no support strategies to help those who are still employed; the potential for individuals to take positive self-help steps is limited because there is no concrete problem to remedy, but there is 'persistent uncertainty about whether or not the feared employment instability will actually occur' (Burgard et al., 2009; Ferrie, Shipley, Stansfeld, & Marmot, 2002; Hartley, Jacobson, Klandermans, & van Vuuren, 1991; Heaney, Israel, & House, 1994; Hellgren & Sverke, 2003). According to the World Health Organization (WHO, 2003, p. 20):

The health effects start when people first feel their jobs are threatened, even before they actually become unemployed. This shows that anxiety about insecurity is also detrimental to health. Job insecurity has been shown to increase effects on mental health (particularly anxiety and depression), self-reported ill health, heart disease and risk factors for heart disease. Because very unsatisfactory or insecure jobs can be as harmful as unemployment, merely having a job will not always protect physical and mental health: job quality is also important.

Heaney et al. (1994) show that chronic job insecurity has a more detrimental effect on the health and well-being of workers than isolated cases of high stress, both in terms of the intensity and persistence of physical and mental problems. They argue:

Job insecurity acts as a potent chronic stressor and should be included in studies of occupational stress, particularly in industries where employment opportunities are declining. (Heaney et al., 1994, p. 1436)

The extensive literature on the poor mental health outcomes for those experiencing chronic job-insecurity is relevant to the current study of health and well-being in the Australian fishing industry, as the data indicates both low levels of occupational security and poor mental health.

Methods

Aims of the study

The aim of this study was to identify key strategies for industry and fishing community organisations to enhance the health and well-being of the fishing workforce. The project aims were:

1. to explore how industry supports fisher physical health and mental well-being;
2. to develop and trial a set of case-studies and best practice guidelines (health plans and tool-kits) for industry organisations in enhancing fisher health and well-being in collaboration with industry, fishing communities and health stakeholders; and
3. to evaluate the case-studies and best practice guidelines.

Design

The research design was qualitative and adopted an action research methodology to enhance the participation of and input from stakeholders (Greenwood & Levin, 2000). An action research approach requires close working with communities to ensure that the issues worked on have relevance for those affected. Our approach was premised on building linkages within identified communities, to work with key stakeholders to map existing health resources and their usage, and conduct interviews to ascertain the key issues that affect physical and mental health and well-being of fishers. The study employed a mixed method, multi-site case-study approach. The study received ethics approval from the Faculty of Arts and Education Human Ethics Advisory Group, Deakin University.

Project reference group

Initially a project reference group, comprising of stakeholders from Fisheries Research and Development Corporation and fishing organisations in Victoria, Queensland and Western Australia, was established. The project reference group helped to identify case-study sites and to verify lines of interview questioning and initial research directions. Lastly, the project reference group considered the draft findings of the study and provided encouragement, insights and suggestions, which are reflected in this report. The reference group is well situated to assist the industry to implement the recommendations of this project.

Study sites

The case-study sites were selected based on diversity in terms of size, location and level of remoteness. The purposively selected case-studies enabled exploration of any variations in fishers' physical and mental health issues, and health and well-being resource use and information seeking behaviours. It also

allowed for a consideration of different health service provisions, allowing for those variations in State services and degree of remoteness from various health services. In addition, the sites selected were also based on the support that the project received in its approach to the Fisheries Research and Development Corporation (FRDC) for funding. Support came from individuals and industry organisations in Victoria, Western Australia and Queensland.

It was initially planned to collect data from four case-study sites; however, the Queensland site did not proceed due to logistical issues with timing and availability of participants. Although, support came from the Queensland Seafood Industry Association (QSIA) and the Queensland Government through Fisheries Queensland, extensive efforts to establish a case-study site, planned for south-eastern Queensland, did not eventuate. The remaining three sites were situated at Northampton in Western Australia and two sites from the south-eastern continental fishery region around the state of Victoria, Lakes Entrance and Port Phillip/Westernport.

Interview and group discussion participants

Across the three case-study sites interview and group discussion participants comprised of 34 fishers and included commercial fishing owners, skippers, deckhands and family members. Other participants in either interviews or group discussions included two fishing industry association representatives, two health care providers, one industry office bearer and one local government representative.

Site liaison assistants

Local site liaison assistants from each site assisted with identifying existing health information sources and programs for fishers; setting up interviews with fishing and health service providers; undertaking a Site Health Plan group discussion; and assisting with mapping site specific health services and programs. These site liaison assistants, all were women, were instrumental in motivating fishers to attend group discussions. They were identified because they were, on the one hand, the recipients of information, concerns, and confidences about health and well-being issues, often having first-hand experience of these. Conversely, they had the capacity to disseminate information and motivate cooperation in a positive and effective manner, to a disparate, sometimes geographically dispersed community, who are often disengaged from discussions of their own health and well-being. It should be stressed that this study could not have been conducted without these site liaison assistants, and that the recruitment of people with local insight and influence significantly increased the success of the project.

Data collection

The empirical evidence for this research was drawn from face-to-face interactions with fishers and key stakeholders from the commercial fishing industry. Data were supplemented by information from health service providers and Medicare Locals in three case-study sites.

Interviews and group discussions

Individual interviews and group discussions fishing industry stakeholders were conducted from May to August 2013. All interviewees and participants in the group discussions were given Plain Language Statements (PLS) providing detailed information about the research project. The purpose, background and procedures of the project were outlined, as well as the possible benefits or risks to participants. Sections covering privacy, confidentiality, disclosure of information and results of the project completed the PLS. In keeping with the ethical guidelines of the National Statement on Ethical Conduct in Human Research (2007) all participants signed a consent form (Appendix 1).

A number of open-ended questions were asked of the interviewees and group discussion participants concerning physical and mental health issues, the nature of stressors, use of health resources and characteristics of preferred services and information sources. Each of the interviews and group discussions were between one and two hours in duration and, with participants' permission, were digitally audio recorded and later transcribed. Within the group discussions strategies for improving health communication strategies were discussed, refined and initiated. Discussion around site specific health plans were oriented around developing cost efficient and effective ways of disseminating health information and facilitating access to services and programs for fishers at each site.

Health service data

In addition, the research methods incorporated charting of health information, services and resources. Information on the health services available in each of the sites was gathered initially by desktop research. This was supplemented by on-ground observations during site visits, discussion with local site liaison assistants, and contact with representatives from health services, Medicare Locals and medical practices in the Victorian and Western Australian sites to gather information about health service provision. This information complemented information gained through interviews with health service personnel and fishing industry stakeholders in these two sites. As one case-study site was situated near two major metropolitan areas with a wide range of health services available and a widely dispersed group of fishers in terms of residential addresses it was deemed that desktop research was sufficient.

Data analysis

The interview and group discussion data were transcribed verbatim. The transcripts, along with notes and other data gathered about health services available to fishers in the sites were read and re-read by all investigators who coded key parts of text that illustrated key ideas, thoughts and actions. These coded segments were then grouped together into 'categories' of similar codes. This enabled the generation of themes from the data, consistent with an inductive analytic approach and with exploratory case-study (Huberman & Miles, 1994; Lincoln & Guba, 1985; Ryan & Bernard, 2000). Key ideas evident in the data included physical health, physical health risk factors, mental health, traditional and modern causes

of mental health risk, conflict with recreational fishers, use of health services, barriers to use of health services, flexible services and entry points, industry actions and women's actions. The following Results section presents the findings according to these themes.

Following from the data analysis, plans of action and resources for implementation were developed. While the development of plans was site-specific (allowing for local context), these plans reflected common themes and best-practice strategies that related to fishing communities more generally. In addition, the fishers, their industry associations, health workers and communities all had the opportunity to be involved in contributing to the development of guidelines for fisher health and well-being.

Results

Introduction

Group discussions and interviews revealed a number of findings localised to the regions in which the fishers were working, however most findings applied across all groups. These findings included specific physical health issues associated with working as a fisher; mental health issues or ‘stress’ which is experienced when working in the industry; and the use of health and health care services.

Physical health

Discussions at all three sites revealed a range of physical health issues. Many of these were specific to the fishing industry although some (particularly musculoskeletal) are endemic in all occupations that rely on physical labour. In this section, we describe the physical health issues identified and discuss the strategies identified for dealing with these. Physical health risks were viewed as being alleviated through work, health and safety (WHS). WHS training focused on mitigating risks of physical injury while at sea – for example, dealing with hooks and winches particularly in rough sea conditions. While ongoing training did not always occur across all sites, participants in group discussions highlighted the requirements to run WHS training on vessels, to provide induction for deckhands and that medical check-ups were compulsory for Masters licences. The importance of WHS was described by one participant, who stated that it was through meeting WHS obligations, that they could maintain the health of the crew. The most commonly discussed physical health issues were related to environmental, lifestyle and long-term physical health risks, discussed below.

Environmental health risks

The outdoor nature of much of fishing labour, particularly for deckhands but also skippers, means that sun and wind damage is an ongoing concern. Several older fishers (<50 years) and some younger deckhands (>30 years) had had skin cancers removed by their local doctor. It was encouraging to note that awareness about the potential damage caused by the sun was well entrenched, and using protective clothing and sunscreen is now viewed as common practice. Some put this down to general community campaigns to educate the public, such as the ‘Slip! Slop! Slap!’ program:

Goin’ back to the sun, and exposure like blokes wear hats and there’s a block of block-out on every wheelhouse wall. (Fisher)

Yeah long sleeved shirts. Most crews adhere to that. I mean it is mainly deckhands that are exposed to a lot more of the environment than what the skippers are. (Fisher).

That this was evidence of a change in practice over time was evident in one fisher's description of his observations of the change in culture and practice:

When I was a young bloke on the deck it wasn't cool to put block-out on, and a hat. Nowadays if [Name], the fella who worked with us, the first thing you do is get the block-out. (Fisher)

Overall, there was an awareness regarding the impact of the environment on general health. As one participant stated:

I got told when you do your cataracts and that, it's not so much the sun, it's the wind. It dries your eyes out. (Fisher)

Lifestyle risk factors

In addition to the identified environmental health risks, lifestyle risk factors were exacerbated by the nature of the work in which fishers were engaged. As also indicated in the literature, there was awareness of the effects of fatigue and sleep patterns on physical health, with particular reference to poor diet, which in turn was linked to obesity. There was a perception that there was a high level of diabetes among fishers in Victoria, and a general awareness about obesity and related health issues.

Diet was another lifestyle factor highlighted for those fisheries requiring long trips to sea, perhaps for weeks at a time. Supplying the crew with fresh fruit and vegetables on longer trips is challenging:

Yes diet is certainly an issue ... Diet, because you can't take fresh food (Fisher).

Poor diet can contribute to a range of other health issues, such as sea-boils and haemorrhoids: "You want to add poor diet and lifting heavy things; I mean haemorrhoids would be number one" (Fisher). There were no clear indications given as to how the issue of poor diet could be addressed in fishing communities. For example, two participants stated:

Actually the Gippsland is the second highest local government area for male obesity, overweight. (Fisher)

I mean you've got guys getting up at 3 o'clock in the morning – they don't have breakfast at 3 o'clock in the morning. Then they, you know they work throughout the day – yeah like I said, breakfast, and if they do get breakfast at say 8 o'clock that's all time dependent as well. So then you're having irregular sleep and irregular eating patterns at the same time. (Fisher)

Long term physical health risks

Beyond lifestyle, the long term and chronic health risks associated with manual labour were discussed. One interview participant stated how the manual nature of work predisposes fishers to long-term problems citing ailments such as arthritis in fingers, thumbs and wrists as a health problem.

There was also general acknowledgement and acceptance that back problems were ‘part’ of working in the industry, although it was noted there had been improvements in equipment which could minimise musculoskeletal injury.

Oh yeah, all fishers has got a crook back (Fisher)

A lot of our boats and that are set up now with gear on them to help so that people don't get crook backs. (Fisher)

Yeah, you're whole body's in the weather all the time so you've got to get a bit – a lot smarter about the physical side of it now than what we used to be to avoid back strain. ... And you were working in a lot more different conditions, like I mean sea conditions that had a big input on back strain and the rest of it. (Fisher)

As one industry leader noted:

Fishing is labour intensive work and can be hard on people's backs. So back injuries are a common health problem for fishers. Hauling nets and using heavy machinery takes its toll. Also, they have to bend over for extended periods when they are hand sorting their catch. (Industry office bearer)

The physical health long-term impacts of working in the fishing industry was described by one fisher:

I suffer with, you know the knees get a bit sore and the shoulder gets a bit sore – now I don't think I'm any different to anybody else though. But I'd suggest that people – and I haven't been on the water a long time – but I'd suggest that people that are on the water all their life: if you started on the water when you was fourteen by the time you're forty-five or fifty your hips and knees will be giving you all sorts of problems. Just the movement, and just doing what you've got to do, there'd be a whole range of things that would give you trouble. (Fisher)

Mental Health

Fishers in all case-study sites identified mental health issues as being the key challenge to their well-being. While discussion of physical complaints and issues occurred during group discussions with fishers, talk regularly returned to the prevalence of stress in their lives, and the perceived causes. Fishers' used terms like "stress", "depression" and other colloquialisms such as "feeling a bit down" or someone having "a bit of mental health", to convey their experiences of poor mental health. Nevertheless, to highlight the prevalence of mental health issues, one participant indicated:

We have a higher level of males who suffer from depression and anxiety. It's about forty-three percent of the men who were surveyed by Victoria Health have a mild, a medium level of depression and anxiety. And if you look at some of the things in [this area], like we've had floods, we've had fires, we've had in a lot of industries, like the fishery industry or whatever, so there's quite a lot of impact on the mental health of a lot of the male workers. (Fisher)

Within the group discussions it was noted that fishers discussed multiple causes of stress, however within these multiple causes, there were two types of stressor highlighted. The causes of an individual's poor mental health are complex and potentially diverse, and we do not assert that the stress fishers report can be attributed to a single cause or, for that matter, a range of clearly identifiable causes. However, the data on stressors can be clustered into two groups consistent with the broader analytical themes emergent in the study, as well as other literature that distinguishes between 'risk' and 'uncertainty' in fishing (Dwyer & Minnegal, 2006b; Minnegal & Dwyer, 2008b). One set related to the more 'traditional risks' faced by fishers while the other type concerned the 'modern uncertainties' within the industry. Traditional risks within fishing were about calculated risks over which fishers had some control, and which they could approach using their fishing skill and knowledge. However, fishers depicted the 'modern uncertainties' within fishing as something they have limited capacity to manage, and which therefore contributes significantly to their levels of stress. Each is discussed in detail, below.

'Traditional risks' in fishing

Traditional risks within fishery include those posed by dangerous working conditions, fluctuating markets and variable catches. The following discussion between Fishers, within a group discussion, highlights this stress, where a bottle-neck passage between the harbour and the ocean (the bar) is notoriously dangerous:

Can I add too the effect that the industry has, from the family point of view. Because you know having grown up in the industry and what-have-you, it's the insecurity of the industry it sort of

rolls over and affects the family: the wives and the children... The odd hours, and not being able to plan for a holiday often because –

The dangerous nature of the fishing

And that's right, and worrying about saying goodbye to Dad, and not knowing when you'd see him again.

The insecurity and the danger itself

Absolutely and there's been more than a few dads that have gone out over that bar and not come back. And so those sort of things are all having an adverse effect on the family, and the family life. And Dad's getting a bit strung out because he's worried. (Fisher group discussion)

The economic stressors that fishers have traditionally faced are manageable in part because there is an expectation that they will be able to bounce back in the coming months or years to make up for poor catches or markets. As in other industries dependent on a fluctuating environment, resilience in the face of peaks and troughs is a vital characteristic of fishers. One fisher highlighted the optimism of those within his profession:

The reality of his life is he's the most optimistic because he can have a bad day today, but 'there's always tomorrow'. It doesn't matter how bad things are you can go and catch a boatload tomorrow. It's not like a farmer who, if it's a drought he can walk out the back door and say, 'Well I'm knackered till May next year.' Fishers have always got tomorrow. And a fisherman will struggle on way, way past anywhere anybody else will give up. And that's just the reality of the environment that he's in, and that was a really important thing. (Fisher)

The capacity to manage the risks associated with fishing, both in terms of the physical harm that can – and does – befall fishers as well as the financial gamble they take on every expedition, is presented by fishers as a relatively benign kind of stress. This is particularly so in comparison to the 'modern uncertainties' described next.

'Modern uncertainties' in fishing

'Modern uncertainties' refer to the anticipation of future challenges emanating from government fisheries management decisions. Such decrees typically act to restrict fishers in some way. These limitations or the threat of them, cause fishers distress both due to the restrictions themselves but also in terms of their perplexing and uncontrollable nature. Some referred to "red tape" while another described government bureaucracy as, "the enemy" (Fisher). These 'modern' uncertainties relate to the insecurity of fishing concessions, such as licences and quotas, as well as the perception that managerial change is frequent and unpredictable. In two of the three case-study sites the prevalence of attempted and successful suicide was noted and linked directly to 'modern uncertainties'. In one case, a participant stated:

The mental health is big – when they did changeover in crayfishing, within a two year period there were six successful suicides and eighteen attempted suicides. (Fisher)

The root causes of these stressors tended to be related back to the **lack of control** that fishers felt they had over their livelihoods. As noted in the background research section on page 4, the security of fishing licences and quota are dependent upon their repeated reissuing (usually annually). While this often occurs, sometimes it does not, and there is a strong perception in the fishing industry that fishing concession assets may be rendered 'worthless' overnight. The notion that fisheries could be closed "...with the stroke of a pen" was recurring.

"...with the stroke of a pen"

Numerous references were made to the fear of future closures or restrictions, and tended to draw on fisher experiences of sudden closures etc., in other fisheries. Fishers emphasised the perceived rapidity; the unexpected nature; and the inability to anticipate, and prepare for, such closures, as being particularly worrying:

In a lot of cases I don't think the mental health issues are a great deal different to anybody else that runs their own business, in a lot of cases. Only we have many other people that have influence over us that we have no control over. (Fisher)

My main thing is how the government's got control over ourselves, like they can just wipe us out with the stroke of a pen. (Fisher)

Fishing has been wiped out with a stroke of a pen. It's not a possibility. You know like the Victorian scallop industry in Port Philip Bay was wiped out in a ten minute car ride, from one political function to another by Jeff Kennett. (Fisher)

When I was thirteen we went to Queensland on holiday, my parents and the rest of my family, and at the time my father owned three shark boats and was considered to be a pretty affluent man. Whilst we were in Queensland... the Liberal Party made a ten o'clock at night law. And on the Sunday... all shark fishing was banned in Victoria... [and] he was out of business... So that's how quick it can happen. (Fisher)

If the fisheries become, unsustainable or gets to that stage where it's stressed, we're the easy targets because you fix us with one letter – a Fishery's Notice telling us – you know whether you do it on “you're not allowed to catch fish”, or “your total days you're allowed to work” or whatever. (Fisher)

One thing that's a concern to myself is I don't have long term access to the fishery. My licence is a one-year fishery, like one year by year. I don't have any tenure for long term. (Fisher)

Fishers reported being told by government fisheries managers that while licences are, indeed, issued on a year-by-year basis; there is a presumption that a licence entitles the holder to a perpetual fishing right. Despite assurances provided to fishers, they remained concerned about their long-term security in the industry. The memories of the 2007 closure of Westernport Bay to commercial fishers so that it could be used as a recreational fishing ‘haven’, remain fresh in the minds of many fishers in Victoria.

One fisher noted that even the fisheries officers at the time were impacted by the abruptness of the Westernport Bay closure:

Even the boys at Fisheries were affected as well and I don't know whether there were mechanisms in place to help them deal with that. Because it came so sudden and no one was aware of what it was. (Fisher)

The threat of such closures were depicted as being immediate, particularly in one of the study sites where there exists a concerted campaign by recreational fishers and environmentalists to ban commercial fishing in the region:

There's a lot of now negativity there... [and] the anxiety that we're feeling, because... the next twelve months is torment for us. (Fisher)

While changes may not always be unexpected or sudden, rapid changes were depicted as being a source of anxiety for some fishers:

The main thing was the rapid change during the last few years. Some fishers are put under a lot of stress through the change.

I think that now with the new way that they did [recent shift to quota management], I think the psychological pressures are a lot higher... [now] they fish today, they don't tomorrow, they do the next. There's no consistency in their work patterns.

These industry changes were shown to have affected the whole community. These have included the closure of a local school, the closure a tavern and a contracting of social events within the community. This has further led to a greater movement and transiency of fishers, reduced social cohesion and the discussion of fisher issues, such as physical and mental health.

“...it's not worth two-bob when we go to use it”

Fishers reported feeling limited in terms of their capacity to obtain loans and to make long term business plans:

I can't go with a piece of paper and say to the bank, “Can you lend me some money so I can buy a new boat?” They say, “No”. Yeah well, I knew that the presumption [of a perpetual licence] is there, but it's not worth two-bob when we go to use it. If you know what I mean? (Fisher)

The other thing is people want to invest money. Fishers like, we're continuing to want to invest money but to go and invest like I need another boat, so there's – by the time I deck it out there's another eighty or a hundred grand. I can't go without putting something else up as security. I can't go and say – and I get back to my licence again, but nobody will take that, and on the current value for my licence it more than covers it, that's all I want to put up. But I can't do that. I've got to free some other assets up as collateral so that the bank's happy. (Fisher)

As you can see the mental health is much more – it overrides the physical... what causes the mental health?... at the end of the day it's the financial impact that creates the stress. I mean if it's going to cause [fishers] losing money as a result that increases that stress level like tenfold. Because fishers can see ahead and they can view things down the track – what's going to happen today may affect them five times. (Fisher)

Fishers acknowledged that occupations such as fishing and farming involved financial ups and downs, and that these could be anticipated, allowed for and recouped by skilled professionals. The uncertainty for their business emanating from management decisions and licencing arrangements, was depicted by fishers as unknowable and unmanageable and, therefore, particularly stressful.

“I don't know who controls what anymore”

In some cases, fishers indicated that it was unclear where decisions were even emanating from:

Because we're a small group I think that they think they can just disregard us. And you've got half a dozen different government departments have all got a finger in the pie in the bay. And I don't know who controls what anymore. (Fisher)

Oh you can go to people, you can go to people and they say, “It's not my problem” You get into the bureaucracy –and that's what I said he said bureaucracy, it's the government departments. Finding your way through the system and getting the right people to help you is just about impossible or you find out too late. You know like they'll put a notice in the paper, that we generally don't read as a rule –you know half way through The Age or something like that in a little liner –and you don't get that information until it's too late. You know they've already had their consultation process, or somebody –yeah that's one of the main things. (Fisher)

In these cases fishers indicated a fear of the unknown, or the unknowable, manifest in complex government departments and systems of management.

“Safety and security, that’s what we want”

The impact of perpetual uncertainty on the health of fishers, and the importance they placed on this issue being addressed as a matter of industry priority, was emphasised within each group. For example, four fishers stated:

We ... need to take into consideration the processes and the effect it’s going to have on the fishers in the industry. We all understand what’s happened [in regards to sudden closures], and we all know what may happen. So at the end of the day the one priority and focus will be some sort of security mechanism where the fishers will feel that security. It’s no use [Fisheries Victoria] just saying, ‘Hey look don’t worry, we don’t know of any closures.’ It’s not good enough anymore. (Fisher)

Safety and security, that’s what we want. (Fisher)

It’s [assurances from the government] not good enough anymore ... because their health is suffering too, and there is evidence of that. So we need to be aware of that. (Fisher)

All it takes is some sort of policy in Fisheries, in their policy when they’re developing their policies that there be some sort of –maybe like a check list –to actually ascertain who it’s going to affect, how it’s going to affect them... [and how] to address that. (Fisher)

Throughout the group discussions, it was evident that fishers were highly aware of the stress they are under due to changes to regulations and the uncertainty that is associated with potential future changes, and the impact this had on their health.

Conflict with recreational fishers

In addition to the anxiety and uncertainty caused by ‘modern uncertainties’, some fishers highlighted the stress they were under due to strong opposition from recreational fishing lobby groups. This final group of stressors related to negative interactions that fishers were experiencing with members of the public, recreational fishers, and environmentalists. Fishers who worked in Corio Bay, near Port Philip Bay, described regular encounters involving verbal and physical violence, the destruction or sabotage of expensive fishing equipment and nets, and the slashing of vehicle tires.

Now we all know there are elements in the recreational sector out there that are doing really bad things and slashing tyres and carrying on like complete (Fisher)

And coming and anchoring in our shots as well. (Fisher)

[For example] there's a group of people that would like to get us out of that area and they get the newspapers onside. They write mistruths about what happens and what we do, and it's really hard to refute those things. Once you say something, it's hard to change it. And I think that puts a lot of pressure on people. (Fisher)

There's a whole range of things you know from physical to verbal... abuse to abuse that's through innuendo sort of thing. Yeah just a whole range of little things that all add up. (Fisher)

One of the big problems is they abuse us and they're starting to throw things at us, and things are going to get out of control. Because I just want to know if someone gets hurt – if one of our deckies gets hurt, or we get hurt, what happens? (Fisher)

Fishers from Western Australia reported some negative interactions with recreational fishers, but these consisted mainly of gear conflict (recreational lines getting tangled in professional equipment). This problem was being addressed through education programs.

Health seeking behaviour

Use of health care services

In addition to barriers such as perpetual occupational uncertainty, several themes emerged from the discussion about use of health services. In some discussions it was evident that fishers are proactive about health (although all examples referred to physical health); but there was also consistent acknowledgement that this was not the case for all those in the industry. For example, the fact that the group comprised those who may not be representative of the whole industry was acknowledged:

That's where it's a bit unfair talking to guys like us because we're probably pretty pro-active in our health. Well that's why we're here (Fisher).

I do, every year I have a full check-up. (Fisher)

That there is different capacity to take health actions was also discussed:

Like basically we're reasonably affluent and we can go and do the things that we need to do when we want because we can afford to do it. Not everybody in the industry is in that position. You know like I can afford to go to my GP, but it's a whole different ball game if you've got to go to the clinic and sit there and wait. (Fisher)

Where barriers were discussed, these were attributed to the work context; but also gender, age and socio economic class. That there were differences between owners/skippers and deckhands were also mentioned:

Some of them are good at looking after themselves, and many don't. The skippers and the owners tend to be more knowledgeable and aware and interested in looking after their health... my strong impression is that the crew, for those boats that have got crew, the crew are a different socio-economic group and they generally do not access services as much. (Doctor)

That age contributed to use of health services was evident in the comment that:

I don't think a lot of them actually go to the doctor for example if they have an injury....They're all sort of 'self-assessed doctors'. They assess their own conditions, and they'll work on strategies that they may know from you know like something that's more practical that they'll do themselves and get over it. (Fisher)

Lack of health service use was attributed to masculinity – the idea that males are less likely to use health services is well documented in the literature (Robertson, 2007). For example when asked: Has anyone used any of the health programs in the community? Men in one group responded:

Oh we're men; men don't use them (Laughter). We're reluctant, you know it's widely perceived that men very rarely – they're reluctant (Fisher)

And while there was diversity of opinion about the use of services for physical health, there was acknowledgement that there was widespread reluctance to seek help for mental health issues. As one key informant said, fishermen are “not inclined to access mental health services, or to talk about stress and related issues” (wife of fisher).

The difficulty in taking action on mental health issues is also illustrated in the following exchange between fishers at one group discussions:

Yeah but you've got to go to the doctor to tell them that you're depressed

Yeah but even then once you've done that you've got a two stage process.

Oh for a fisherman if they were to go and start feeling pretty ordinary and the doctor says to 'em, "Oh well you're probably suffering a bit of depression you'll need to go see a counsellor" –

I know what'll happen.

Yeah you're right too.

Leave it for another day.

And then you have a good day.

And you don't need it. (Fisher group discussion)

The difficulty of getting recognition of mental health needs, and then acting on them was also discussed by fishers in one group:

I think Beyond Blue and Men's Shed they're programs that are starting to get going now, and I think as they develop more and more with those avenues that men can go to and talk about mental health issues. But to just get... a bunch of blokes together every now and then to talk about mental health issue just won't happen. (Fisher)

However, another fisher in the group added:

"No, we'll sit and whinge about the fisheries and bank managers and things like that, but you're not going to [talk about mental health]... you vent your spleen and then away you go. It definitely helps."

Barriers to health care use

The nature of work in the industry was seen as a barrier to seeking health care. The unpredictable nature of many fishing operations, and the non-standard hours worked, meant that making and keeping appointments to see health-care professionals was difficult. *"It's goin' back to that access the doctors: well then they've got to make an appointment, they lose a day's fishing probably"* (Fisher). There is a perception among some in the fishing industry that they work more irregular hours than those in other

the workforces: “*Well the mainstream society doesn’t fit with the fishing industry*”. Certainly, there is a high level of variation in the hours worked by those in different fisheries, and the dependence on the weather for most fisheries means that the decision to go to sea or stay at home is influenced by continuous changes in the weather, wind, tide and seasons (King, 2011).

Even when health care workers, and others, try to accommodate fishermen by coming to ports at appointed times, the unpredictable nature of fishing may mean that fishermen are not available:

I don’t know how many times different organisations want to come and meet the fishermen here, in this room, and say, “Right we’ll be down Wednesday.” They come here: there’s nobody here. [And they say,] “Where are they?”... Well that’s his day fishing, he’s gone fishing. (Fisher)

You have touched on something there because the way we work, you know like you never know when you’re going to get seen on half the time. You make a doctor’s appointment, especially in Lakes Entrance it’s really hard to get to see a doctor, they’re that busy – and you can make a doctor’s appointment, the next thing you’ve got to go to see so you miss out. So you say, “Oh bugger it, I won’t worry about it.” So you know like you might have a blood pressure problem or something that mightn’t be picked up for quite a while, until you get to the doctor for a regular check. So that’s a thing that I’ve noticed over the years, trying to get access to a doctor to have a check-up or whatever you might want to have done. It’s a bit difficult at times. (Fisher)

Similarly, others who work unpredictable and non-standard hours, such as farmers, shift workers, medical professionals and others, may also find keeping medical appointments challenging, and that interruptions to their work schedule are unavoidable. However, rather than being a simple reluctance on behalf of fishers to seek medical services, or an issue of timing, several related factors contribute to limiting the capacity – the agency – of fishers to prioritise their own health.

Agency

What emerged was a complex relationship between capacity (or agency) to seek health care services and industry demands. For example, the fact that their catching capacity is not equal across all days of the year and may change significantly from one to the next. Participants highlighted the nature of the

industry is that fishers need to be ready to fish every day and at a moment's notice. This was emphasised by a fisher's wife who stated:

I said to him last night, 'Are you going fishing in the morning?' He said, 'I don't know, I have to wait and in the morning and see what the Bureau of Meteorology, what the weather tells me.'
So when the Bureau of Meteorology says the weather's good all hell breaks loose... Within an hour... they've got to go. (Fisher)

In this respect, it was outlined that fishers may not be able to go out and catch the fish that they would have caught two days ago, because conditions, such as moon phase, tide and temperature have changed that may not occur again for some time. Therefore, working days, or fishing trips, were indicated to not to be interchangeable.

Another factor discussed that limits fisher flexibility is that skippers must be able to command a stable, safe and effective crew, who are ready to work when the weather is right (King, 2011). Changing plans or foregoing a fishing trip in order to attend a medical appointment was highlighted to impact not only the individual fisher, but also the crew and their families. In this case the value of a day off work was observed to be quite different than other primary industries such as farming (Kilpatrick et al., 2012; Kilpatrick et al., 2013b). Further it was highlighted that as small business owners, fishers do not get sick leave and if they do not go to work then they do not receive an income. This includes the crew, who are often paid on a percentage-of-catch basis. The idea of a quick fix to health and medical problems is therefore very attractive. This is exemplified in the following:

I go to the doctors and he says, "You can have two weeks off" –I say, "Give me a tablet, and see you later". Back to work. (Fisher)

And finally, as will be discussed below, the financial insecurity of many fishing operations means that there may be a very high level of urgency with which fishermen approach their business; if there is an imminent concern that a fishery will be closed or the quota removed, then seeking health care or making appointments for the treatment of an unusual mole, a persistent ache in the shoulder, or growing feelings of anxiety, may be given less priority.

Flexible services and soft entry points

While recognising the constraints, there were several suggestions made about health services that may be utilised by fishermen. One idea was that of a 'health check' directed at fishers: The following discussion of the possibility of such a health check embedded within industry at one fishing community is illustrative of a different approach to health services:

And I really think it would be handy to have a targeted fishermen's health check and it should be almost enforced by people who employ –

Yes, so the employer should say, "Right there's a fishermen's health check coming up I want you all to go and do it." So it's support plus employer encouraged.

Yeah, as I said, they should be encouraged too. And I guess it should be more funded to the point where you know people don't feel like it's costing them any extra to do it

Yeah, because we're saying now it's being encouraged, or the fishermen themselves and the owners of the business will be more inclined to encourage as well as the crew would be more encouraged to do it if they know like, "I'm not going to get a bill at the end of it for a hundred and fifty bucks."

So the work health checks that Work Cover's already doing, if that was in a flexible delivery that said, 'Okay yeah we're going to be in Lakes the whole week, we're going to be positioned there.' (Fisher group discussion)

That fishermen might be receptive to such services was discussed:

I'm thirty-five now, which is young or old, but I'm pretty concerned with my health and that, but if they had like a clinic come and say they can check us out one day a month... it would be good. (Fisher)

They also discussed the possibility of 'on call services' specifically for those times when weather prohibited going out to fish, but recognised the difficulty of getting this to happen

They come in and they want someone there. It's almost like an ambulance, they can ring them up and they've got 'em. If they want to see a GP: on-call services. How you'd ever get that to happen. (Fisher)

For those who have got... they are good, they realise that you're a fisherman and they'll try and slot you in. But it is a bit of a problem. (Fisher)

Some saw potential for technology enhanced services, such as telehealth:

But isn't it technology is the way of actually addressing some of these flexibility problems. Because I know with mobile phones you can actually do things like a very basic health check. You can also do on-line learning. You can do all this sort of stuff, like ecology, and that doesn't require you to be anywhere at any particular time.

I actually don't really know how good the mobile technology is once you get out in the –

It depends on where you are doesn't it. (Fisher group discussion)

They also discussed the Mental Health First Aid, but discussed the difficulty of action, even if a problem was identified:

There is a thing called Mental Health First Aid. Which is a couple of days that they run out at the [town]. And basically it just teaches you how to identify mental health problems at the very beginning. It's really just first aid too. If one of your guys actually starts to go a little bit strange then you can at least –

Or one of your mates.

See nobody will own up to mental health readily.

...but it will have to come back to the flexible delivery and how you actually get it out to the fishermen. (Fisher group discussion)

In addition there was also discussion regarding community-based programs that had worked, which included setting up health check stations at a local fishery

So we set up Men's Health outside the – in front of the Fishery. So the guys were good in that they'd come and do their blood pressure before they'd go in [and] when they come out. (Nurse)

I got on to Men's Health; we went and set up the little tent outside the department. We did the boys' blood pressures when they arrived; they went in – how long was that, half an hour? (Nurse)

Industry actions

Beyond flexible services and soft entry points, there were a few examples of industry acting to influence the health behaviours of fishers, or accessing services. The actions that were reported to be 'ad-hoc' and many actions related to WHS, whereas the non-WHS related activities tended to be local initiatives. For example, a key initiative in relation to addressing mental health concerns in the fishing industry emerged from the women in the Northampton fishing community. Magnets displaying key phone numbers of mental health crisis organisations, such as *beyondblue*, were distributed to each fishing licence holder. Each fisher received three magnets: one for the boat, one for the deckie, and one for the fridge at home. In a community where there had been six successful suicides and eighteen attempted suicides over two years, the current state of mental health within the industry was considered in need of urgent attention. Despite these efforts, skippers and owners were more focused on and acted to ensure their crews received and had WHS/OH&S training:

Well we run an OH&S thing on our vessel. Everybody's got an OH&S program. So the new deckies inducted onto our vessel, we say, 'Well these are the things you don't do, and these are the things you do.' Many of the crews nowadays have done you know a training course. (Fisher)

At the Lakes Entrance site, the fishers' cooperative building included a canteen space and was a venture for social interaction and an opportunity to share experiences. However, fishers were eager to point out that social interaction in the wider community was perhaps more important to them than interaction within the fishing industry, a fact they attributed to the diversity of fisheries operating out of the town:

Where you were talking about their industry as being a community, here just the reality of it is each fishery is its own. So in the group stuff it's basically done at community level on, you know golf or something like that. (Fisher)

Women were proactive in organising social interaction to help fishers and families deal with the stress of changes to quotas and regulations.

What I try to do is find ways of how I can bring [fishers] together. One of them was a clean-up day with Ocean Watch. But I thought it was an opportunity for not only the fishers to come down to visit where we meet down at the shed [but for] the families, and their kids to get down and get to see [other] kids (Female Port Philip Westernport Bay fisher)

The most ambitious example of a mental health initiative came from the Western Australian site. In the absence of external programs and government initiatives perceived as appropriate for the fishing community, a group of fishers' wives had obtained funding from a national mental health organisation to hold a daylong discussion of issues facing fishers and their families. The day covered physical, mental, psychological, economic and social issues. Issues raised and discussed by the women included a number of things that were explicitly identified as influencing mental health, such as financial issues. Feedback gathered on the day indicated a very positive response to the event.

In addition to these grassroots efforts the Western Australian Fishing Industry Council organise an annual fisher event that travels to various fishing communities. There has historically been only limited coverage of health and safety issues, however fishers acknowledged there was potential for the event to cover more health related matters. It was stated that:

they tend to find all the people that are funded to do anything within fishing, so the Fish Eye guy, the Safety guy, all those, they tend to jump on board. But it was one-on-one education, screening. 'Come into the bus you're going to get your eyes checked, your ears checked, your skin checked, your blood pressure and your basic stuff – here's your information, and we'll tell you what you need to get checked further with your doctor' (Fisher)

Fishers reported that industry associations were aware of the stress that resulted from changes to quotas and other regulations and other health issues, however beyond what women's associations were achieving, health was not necessarily a priority for industry associations:

[Women Industry Network Seafood Community] (WINSC) is pretty out there. At one of their conferences, they had a professor in social sciences that actually spoke to them about their health and how to take care. The [National Seafood Industry Alliance] (NSIA) deal with so many issues as well and when they prioritise they may look at [health] as not as a priority. They're aware of it. (Port Philip Westernport Bay fisher)

In some cases, local industry attempted to influence the policy decisions that were limiting quotas and creating the uncertainty that was at the centre of much of the stress fishers were experiencing. However, it was felt that bureaucrats had an apparent lack of understanding that fishers needed to be out fishing to earn an income, which hampered fishers' attempts to have their voice heard.

[Name of fisher] had a meeting yesterday with [Title of Government official] from Melbourne and you know it is constantly a battle to explain to people, but for a bureaucrat to say, 'Well we come from Canberra and we want to see you at nine o'clock on Tuesday. Well that's his day fishing [and] the third meeting in three days. (Fisher)

Despite the grassroots efforts there was an acknowledgement of many ongoing issues, specifically pertaining to mental health, within various communities.

Women in action

The role of women in the fishing industry is important in identifying and combating poor mental health. They are often facilitators of information exchange, the ones who maintain the social bonds in the community that help prevent poor mental health, and they often stand at the front-line of mental health crises when they do occur. While there were no women who regularly worked on boats, women's position in fishing communities was notable. This is relevant to the findings of the research; namely, that these individual organisers – who are usually women with a stake in the industry – are vital points of contact, and modes of communication, with fishers. They both receive and disseminate information about health and well-being issues; they motivate cooperation in a positive and effective manner across the geographically dispersed community, who are at times disengaged from discussions of their own health and well-being.

In all three case-study sites, the site liaison assistants for the project were women. They were explicitly involved in advocating for fishers, and could be considered de-facto industry-body heads. As such, people, usually women, in these roles can be gate-keepers to the commercial sector, which includes both men and women. Indeed, in all other potential case-study sites scouted for the project, the individuals nominated as having good contacts, knowledge of the local fishing community and influence with those people, were also women.

Two of the three participants were the wives of fishers, while the third is married to one of the few in her large extended fishing family who does not fish. These women command a respect in their community and can use this to mobilise, the mostly male, fishers when necessary. For example, when asked why they had decided to attend the focus group, a pair of deckhands answered with a grin, *"Because [name of site liaison assistant] told us to"* (Fisher).

However, even female fishers were not always able to get their male counterparts to engage with health information:

That's the mentality. For example, being able to organise someone to go and have a talk to them or talk about the OH&S issues, sometimes they don't even want to talk about the OH&S issues because they feel it may actually be used against them. (Female fisher)

Despite this, women were persistent and proactive in organising social interaction to help fishers and families address the stress of changes to quotas and regulations, as reported above in the Western Australian day-long event and the Ocean Watch clean-up day, previously discussed. Another indicator of the importance of the role of women in addressing poor mental health in the fishing industry is the nature of discussions held at the annual Women Industry Network Seafood Community (WINSO) meetings. This association is made up of women with a personal interest in a fishery with most married to fishers.

In addition to the presentation about health at an earlier conference discussed previously, the current research was presented at the 2012 WINSO conference held in Canberra. During this conference, a focus was the high levels of stress in the industry, the disproportionate number of suicides, and the pervasive sense that fishers have limited control over their future businesses and lives. At this time the speeches were passionate, received with support, and were sometimes accompanied by tears. There was open discussion of the widespread stress caused by modern uncertainties within the fishing industry and the impact it is having on the productivity of the industry.

Health plans

As a result of the research and information gathered from individuals, group discussions, local health services and a search of current information, site-specific health plans were developed (Appendix 2). They were focused on providing cost efficient and effective ways to disseminate health information while seeking to facilitate greater awareness and access to services and programs for fishers at each site. Once drafted the health plans were sent to each of the participants for their feedback. Further modifications of the health plans were made in the light of the feedback, then disseminated back to the participating industry organisations and interested individuals.

Each health plan included the following sections:

1. Health and well-being issues, with sections on physical and mental health as identified by the participants;

2. Actions to fill gaps, which identified gaps in local health service provision and/or resources;
3. Existing actions, information services and gaps; and
4. How the health and well-being issue may addressed.

The project timeframes did not allow the opportunity to canvass all issues at each site and this lead to not being able to address all problems within the timeframe. As such, a number of key areas within the health plans, such as the section ‘actions to fill gaps’, were unable to be resolved within the project timeframe. In most cases, it was felt that these sections needed to be addressed by either community health services or by industry so they had ownership of identifying and especially, taking action to implement a solution.

Health tool-kits

In addition to the health plans, health ‘tool-kits’ were circulated to each of the three case-study sites. Each tool-kit contained site-specific information and contact details relevant to the identified health and well-being issues for that community (Appendices 3 and 4). There was considerable overlap with these issues and it was decided to divide the tool-kits into five sections:

- Acute injuries
- Chronic pain
- Diet
- Sun-related issues
- Stress and mental health issues
- Key organisations, contacts and websites

Initial feedback on the tool-kits was mixed, yet very useful. All feedback from fishers was provided through the three site liaison assistants, rather than directly from fishers themselves. Health professionals in the regions were very responsive and generally positive about the tool-kits, however in some cases the toolkits were felt to be overlapping many elements of what highly effective Medicare Local teams had already developed. However, it was not always clear that the Medicare Local had a specific plan to ensure that fishers received their information and accessed the relevant health program or service.

In the Victorian sites the tool-kits were received positively, but with minimal comment. A key suggestion was to include more information about the causes of stress in the industry, including financial issues, managing unpredictability and clashes with recreational fishers. As indicated within the tool-kit

attached, this suggestion would not necessarily lend itself to incorporation into the kits, as they now stand. These comments reinforce the findings about the primacy of stress-related issues in the industry.

In Western Australia the information presented in the toolkits and health plans was identified as being useful, though already available via the Medicare Local and from family doctors. Providing information addressing poor mental health was labelled a ‘Band-Aid’ solution to a fishing community in entrenched crisis. It was suggested that some form of action or intervention program within the community would be more useful than facilitating fisher uptake of available health services. Examples, such as the Western Australian Government initiative, *One Life*, a suicide prevention strategy, were highlighted.

Discussion

The health and well-being of fishers is vital for successful fishing industries, which facilitate public access to fresh seafood and the health of the wider community. Valuing and maintaining the health of the fishing industry's human capital is an issue of productivity that needs to be prioritised as an industrial imperative. In Australia, the health concerns of fishers are grouped together with those of other primary industries such as farmers. Currently there is a plethora of data, which indicates that farmers experience many physical health problems due to working in a dangerous workplace. In addition, it has been shown that they experience higher than average rates of mental health problems, including self-harm and suicide. However, research into the nature and extent of the physical health problems and mental health crisis in Australian fisheries is less extensive. The tendency to conflate the issues of fishers and farmers in policy leave fishers and their particular issues virtually invisible within Australian policy.

Previous research (Kilpatrick et al., 2012; Kilpatrick et al., 2013b) showed that those within farming had benefited from industry involvement in health and well-being programs, but that fishers were less likely to report such participation. Opportunities for participation were also lower in the fishing industry. Assistance programs developed and targeted at farmers were not always suitable for fishers as their needs, working conditions and their stressors are different to those experienced by other primary industry workers.

The small number of studies on fisher health and well-being, compared to those on farming, show that fishers are subject to occupational-specific concerns. This study presents corroborating evidence, particularly in relation to the particular mental health stressors faced by fishers. These stem from both 'traditional risks' (fluctuating fish prices, high fuel costs, crew cohesion and on-shore social relationships), as well as 'modern uncertainties' (unpredictable changes to management regulations, insecure licences and quota value). This stress is manifest in reports of anxiety, depression and, in the worst cases, suicide. Poor mental health may be associated with other physical issues such as poor eating habits and substance abuse.

This study indicates that more could be done by fisher organisations to facilitate the uptake of existing health services, but that their capacity to do so is limited by a number of factors (eg. timing of services). Likewise, while there was some indication that local health care providers were aware of the particular needs of fishers, they were not well resourced to act upon this knowledge.

Barriers to the uptake of existing health services among fishers reflected those experienced in other (particularly primary) industries. The irregular and unpredictable timing of many fishing operations limits fishers from accessing standard health services. Initially seeking medical care was felt to be an issue of timing and access; however, it was shown that fishers generally gave a low priority to health

issues. Fishers were particularly reluctant to seek and even discuss mental health issues, and indicated that while there was an industry-wide concern, there remained a stigma attached to poor health. The male-dominated nature of the industry compounds a culture in which health, and particularly mental health, is not prioritised.

The relevance of gender to the health of fishers emerges again when we consider that the few, ad hoc, practices put in place to benefit fishers were initiated by women in the industry (often the wives of active fishers). It is suggested that the role of women should be recognised as vital to the productivity of the industry, and that their expertise could be applied in conjunction with industry associations and health care providers to facilitate improved health among the fishing workforce.

The risk of identifying ‘women’ as being well positioned to address fisher health (given their current tendency to act as facilitators of good health), is that the serious health issues identified in this study will be ‘ghettoised’ as an exclusively feminine concern, peripheral to the more technical, economic and hands-on concerns of industry. Further, it risks placing the responsibility for the poor mental health of fishers onto women in the industry, when some of the causes identified in this study (‘modern uncertainties’) are outside of their control. Rather, valuing the human capital of the fishing industry is a productive imperative that should be actively recognised and promoted by all those with an interest in commercial fishing. While fishers (male and female) themselves could do more to address the symptoms of poor mental health, the underlying causes of the poor mental health outcomes for fishers in Australia is systemic, entrenched and can only be addressed by government.

Conclusion

Currently there is a plethora of data, which indicates that farmers experience many physical health problems due to working in a dangerous workplace. In addition, it has been shown that they experience and higher than average rates of mental health problems, including self-harm and suicide. However, the nature and extent of research into and actions to address the physical health problems and mental health crisis in Australian fisheries is less extensive. There are a small number of studies on fisher health and well-being and this study has further confirmed the health and wellbeing needs among fishers, particularly in relation to mental health. This study has found that mental health issues stem from both traditional risks and modern uncertainties and are exhibited through anxiety, depression and, in the worst cases, suicide. In addition, poor mental health may be associated with other physical issues such as poor eating habits and substance abuse.

Within the study, it was indicated by fishers that industry associations were aware of the stressors and health issues which fishers were experiencing. Health was not necessarily a priority for all industry associations and in many cases fishing industry organisations were limited in their capacity to influence the health and well-being behaviours of fishers, and the services they need. In some cases, local industry groups were attempting to influence policy that was creating much of the uncertainty and stress fishers were experiencing. Fishers reported that bureaucrats had an apparent lack of understanding of fishers' current needs, while health services and others had an ad-hoc approach to meeting the health and wellbeing needs of fishers. In the few cases identified, health-related actions were initiated by influential fishing community women.

As part of the study site-specific health plans were developed that were focused on providing cost efficient and effective ways to disseminate health information while seeking to facilitate greater awareness and access to services and programs for fishers at each site. In addition health 'tool-kits' were developed and disseminated, although there was mixed response as to their usefulness. This was particularly evident among fishers and communities that were in crisis over changes to fishing entitlements. Overall the study showed that more could be done to increase the uptake of existing health services; however, each fisher's capacity to achieve this was limited by attitudinal and access factors. Increased flexibility in health service provision and soft entry points, where health service information and access are associated with non-health, industry related events, were highlighted as user-friendly ways to improve access to and uptake of services, and consequently the overall health and well-being of fishers.

Implications

A key implication from the study is the need for local fishing industry groups or organisations and health services to work together to identify fisher health needs and ways to address these. Soft entry points that draw on industry events and activities to facilitate fisher access to information and services are an effective mechanism for addressing these fisher health needs. The methods set out in best practice guidelines developed by Kilpatrick and colleagues (2013a), trialed in this study with fishing communities, provide a roadmap for fishing communities and health services to work together to address fisher health needs.

National and state industry associations have a role in raising the profile of fisher health and wellbeing with national and state health related organisations, particularly regarding mental health.

This study has brought to light a number of health issues in the communities studied. It has also provided the catalyst for more open discussion around mental health issues encountered by fishers, among research participants in the sites, and among industry organisations generally. Research participants were particularly beneficiaries of the research process as it was evident that ‘talking’ about mental health *symptoms*, as opposed to issues that *impacted* mental health, was taboo among many fishers. The research itself gave the opportunity to raise and discuss a number of concerning issues. Also within group discussions, strategies to improve health were discussed, refined and initiated. Discussion around site specific health plans was oriented around developing cost efficient and effective ways of disseminating health information and facilitating access to services and programs that met the articulated needs of fishers at each site. It was these opportunities that allowed space for fishers to actively participate in how best to meet their own health and well-being needs and allow self-ownership.

Also as part of this process health plans and health ‘tool-kits’ were developed and although in their infancy, they are designed to increase awareness of health issues and provide resources to reduce or mitigate poor health among fishers. At the conclusion of the project, the responses regarding these resources were mixed with one site showing less interest in taking on the resources. However the two other sites were more positive as to the use of the health plans and tool-kits among fishers and within the industry. Those sites that were more accepting of the health plans and tool kits will require further and more specific development by the various community health services in conjunction with local industry so that specific needs are addressed, and that there is local health service and industry ownership to ensure action identified to address various issues are implemented.

Recommendations

Recommendations

- Fisher health issues must be recognised in research, policy and practice separately from farmer health.
- Health service providers should work with industry associations at national, state and local levels to systematically address fisher specific health issues.
- Industry associations must both recognise and address the implications of industry related uncertainty, including stress, rather than exclusively focusing on the causes of the uncertainty.
- Governments should recognise and take steps to address the negative mental health consequences of insecure property rights in fishing, and the inherent WHS dangers to fishers in Australia.
- FRDC should distribute this report to all FRABs with a recommendation that they distribute it to health services in their regions and request that health services implement the report's best practice guidelines for health service and industry organisations to enhance fisher health and well-being.
- Locally produced guidelines and easily accessible health information (eg, health plans and tool-kits) should be implemented and replicated in fishing communities throughout Australia by regional health services in liaison with the local fishing industry. Services that address mental health should be prioritised.

Recommendations for relevant interested parties

For fishers

- Develop and implement a health and well-being maintenance strategy;
- Contribute to a culture in which mental health symptoms are acknowledged and addressed without stigma;
- Be aware of the need to maintain social connections, especially during 'difficult times';
- Continue to provide support or 'mateship' to other fishers who may be experiencing difficulty.

For industry associations

- Incorporate health and well-being items to industry Codes of Conduct;
- Include health check, health program and mental health first aid as part of industry induction, competency certificate and ongoing licensing for operators;
- Proactively draw upon and support women in the fishing industry to help initiate local actions;
- Address local conflict, through
 - increasing public, and particularly recreational fisher, understanding regarding commercial fishing including education and notification for the public, particularly recreational fishers, about the illegality of interfering with commercial fishing boats;
 - providing processes for recreational fishers to notify commercial fishers if inadvertent damage or loss of gear around professional fishing sites, for example the use of 'recreational' tie tags to attach to professional crayfish pots;

For national and state governments and health services

- Develop and deliver health programs, specifically targeting fishers and the fishing industry, which are in addition to standard OH&S safety and includes mental well-being;
- Implement flexible easy-to-access soft entry points, which create self-ownership, such as mobile health vans, industry specific 'fisher health checks' at mainstream industry events, health technology programs or onsite screening days in conjunction with Medicare Locals and industry;
- Identify and involve health care providers with special interest in fishers and fishing activities to work collaboratively with the fishers and industry;
- Facilitate the development of positive relationships between commercial and recreational fishers to reduce poor perceptions of, and conflict between, the parties; and
- Work with industry, financial institutions and fishers to provide financial, social and mental health support to fishers who are experiencing (financial and health) stress due to the low security of fishing concessions (quota and licences).

Further development

Drawing on the findings of this study, further research could include:

- Building on Brooks (2011), a comprehensive baseline study of Australian fishing industry, with statistics on factors such as employment, age, gender, mental and physical health and well-being, and work-patterns. Compiling this information would be a large task, and require the cooperation of various State, Territory and Commonwealth governing bodies.
- The creation of health and well-being projects that draw on the existing expertise of key local women in fishing communities, in collaboration with industry associations, local health services and fishers.
- Economic study into the actual value of fishing concessions, drawing on international comparisons, to scope a better way of achieving occupational security in the fishing industry.

Appendix 1 Statement and Consent form

Plain Language Statement and Consent form

DEAKIN UNIVERSITY

PLAIN LANGUAGE STATEMENT AND CONSENT FORM



Plain Language Statement

Date: August 2013

Full Project Title: Staying Healthy: Industry organisations' influence on behaviours and services used by fishers

Principal Researcher: Dr Tanya King, Deakin University

Associate Researchers: Professor Sue Kilpatrick, University of Tasmania; Associate Professor Karen Willis, University of Sydney

This Plain Language Statement and Consent Form is 6 pages long. Please make sure you have all the pages.

Your Consent

You are invited to take part in this research project.

This Plain Language Statement contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project so that you can make a fully informed decision whether you are going to participate.

Please read this Plain Language Statement carefully. Feel free to ask questions about any information in the document. You may also wish to discuss the project with a relative or friend or your local health worker. Feel free to do this.

Once you understand what the project is about and if you agree to take part in it, you will be asked to sign the Consent Form. By signing the Consent Form, you indicate that you understand the information and that you give your consent to participate in the research project.

You will be given a copy of the Plain Language Statement and Consent Form to keep as a record.

Purpose and Background

The purpose of this project is to investigate the process by which fishers, community organisations and health service providers communicate in relation to health service provision.

A total of approximately 28 people will participate in this project.

Research has found that fishers are subject to a multitude of stressors, including those relating to government policies and co-management challenges, a fluctuating market place, fuel prices, crew cohesion and on-shore social relationships, and the pressures of working in a dangerous workplace. A healthy workforce is critical for workforce participation and productivity. Research shows poor health imposes costs on businesses and industry through absenteeism, inappropriate risk taking and poorer productivity. Thus there is an imperative to understand ways in which fishers, community organisations and health providers communicate and plan in relation to health information and service provision, and to discover even more effective ways for health issues to be addressed in fishing communities. This research project will 1) document existing channels of health related

communication among fishing community members; 2) in consultation with community members, seek to outline and facilitate practical and cost-effective new strategies for facilitating health communication in fishing communities, and 3) to evaluate the effectiveness of these new strategies and to develop a template for implementing successful health communication enhancement strategies in other fishing communities.

You are invited to participate in this research project because you are either a fisher, community organisation member or health worker living and working in one of four communities selected for this research, or are a representative of an industry association or healthy service with coverage in one of the communities. The four communities are geographically dispersed around Australia.

Funding

This research is funded by the Fisheries Research and Development Corporation.

Procedures

Participation in this project will involve:

- Attendance at a Site Health Plan Workshop, where various strategies for improving health communication strategies will be discussed, refined and initiated.
- At the start of the Health Plan Workshop we will seek your permission to audio-record the interview; you may decline permission.
- As part of the study process you are able to withdraw your data at any time within twenty eight [28] days of the interview.

Possible Benefits

Possible benefits include a better understanding of existing communication channels around health issues in fishing communities, and the development of cost effective and practical improvements to health information and service communication. Drawing on the case-studies and findings from the participating communities, a template for implementing successful health communication enhancement strategies in other fishing communities will be developed. This may inform policy and practices in the areas of health behaviour as it relates to specific industries, and health service planning and development.

Possible Risks

It is anticipated there will be minimal risk from your involvement in the study.

Privacy, Confidentiality and Disclosure of Information

Participation in this study is voluntary and any research data gathered during this study will be kept confidential. Your identity will be kept confidential and any information you supply will not identify you as a participant. In any publication, information will be provided in such a way that you cannot be identified.

All interview and workshop data used in this study will be kept in a locked and secure filing cabinet and password protected computers at Deakin University, the University of Tasmania and the University of Sydney, and will be destroyed six[6] years after final publication of the study results.

Results of Project

The project will produce a publicly available report along with materials to assist in adoption of project findings, including web-based material to inform fishers, community and industry organisations, health practitioners and policy makers, of findings and recommendations that can be used either by individuals or in a workshop. Where relevant, journal articles, conference papers and media releases will be developed based on the findings.

Participation is Voluntary

Participation in any research project is voluntary. **If you do not wish to take part you are not obliged to.** If you decide to take part and later change your mind, you are free to withdraw from the

project at any stage. You may choose not to answer any question. You may withdraw any data you have supplied up until 28 days after the interview. Any information obtained from you to date will not be used and will be destroyed. Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with Deakin University or other participating organisations.

Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Sign the Consent Form only after you have had a chance to ask your questions and have received satisfactory answers.

If you decide to withdraw from this project, please notify a member of the research team or complete and return the Revocation of Consent Form attached. This notice will allow the research team to inform you if there are any health risks or special requirements linked to withdrawing.

Ethical Guidelines

This project will be carried out according to the *National Statement on Ethical Conduct in Human Research* (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

The ethics aspects of this research project have been approved by the Human Research Ethics Committee of Deakin University.

Complaints

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Executive Officer, Human Research Ethics Committee, Deakin University, 221 Burwood Highway, Burwood Victoria 3125, Telephone: (03) 9251 7123, Facsimile: (03) 9244 6581; research-ethics@deakin.edu.au.

Please quote project number HAE-12-079

Reimbursement for your costs

You will not be paid for your participation in this project.

Further information, queries or any problems

If you require further information, wish to withdraw your participation or if you have any problems concerning this project (for example, any side effects), you can contact the principal researcher Tanya King, or associate researchers Sue Kilpatrick or Karen Willis.

Dr Tanya King

Senior Lecturer in Anthropology

Deakin University

Locked Bag 20000 Geelong VIC 3220

Phone: (03) 5227 2149 / 0427889917 Email: tanya.king@deakin.edu.au

Professor Sue Kilpatrick

Centre for University Pathways and Partnerships

University of Tasmania

Locked Bag 1345

Phone: (03) 6324 3632 Email: sue.kilpatrick@utas.edu.au

Associate Professor Karen Willis
Associate Professor of Qualitative Health
University of Sydney
P.O. Box 170 Lidcombe NSW 1825
Phone: (02) 9351 9256 Email: karen.willis@sydney.edu.au

Dr Murray Noonan
Research Fellow
Alfred Deakin Research Institute
Faculty of Arts & Education, Deakin University
Waterfront Campus, Locked Bag 20000 Geelong VIC 3220
Phone: (03) 5227 8791 Email: murray.n@deakin.edu.au

Appendix 2 Project materials – Health plans

Commercial fishers in Port Phillip Bay operate under the authority of a Port Phillip/Westernport Bay Fishery Access Licence. The total number of these licences is capped at forty-two. PPB commercial fishers are authorised to use a range of equipment types including longlines, mesh nets and haul seines to catch a variety of fish species such as sardines, King George whiting and snapper. These fishers provide fresh, high quality and sustainably harvested seafood to Victorian consumers.

Health Plan for fishers at site one

Health and well-being issues	Existing actions, information, services and gaps	Actions to fill gaps	Who will act?
<p>Mental health issues (primarily stress and anxiety) due to:</p> <ul style="list-style-type: none"> limited of control over short and medium term income and business decisions due to frequent changes to government regulations, uncertainty over future government management tool choices (e.g. quotas), and the nature of the fishing concession (i.e. unrecognised by banks as an asset). Regular confrontation with recreational sector, on the wharf, at sea, and in the political sphere. Verbal attacks, gear sabotage and threats of physical violence are commonplace, despite being illegal. 	<p>Verbal assurances from Fisheries Victoria that licences are, indeed, 'valuable', do not address the reality faced by fishers who attempt to draw on this 'value' to secure bank loans. A review is required in order to address possible solutions to this problem. Can Fisheries Victoria conduct such a review?</p> <p>Signage emphasising the illegality of interfering with commercial fishing businesses have been proposed for a number of jetties and boat ramps in the region. Can we follow up on the efficacy of this strategy?</p> <p>Recognition of mental health issues required, along with strategies for addressing the symptoms. Specific distinction needs to be made between the cause of stresses (readily</p>	<p>Conduct review of possibility of ensuring fishing concessions have value recognised by financial institutions.</p>	<p>Productivity Commission. State and national fishing bodies, e.g. National Seafood Industry Alliance, Seafood Industry Victoria, Fisheries Victoria, AFMA. Documenting this need may be a good first step.</p>

identified by fishers) and the effects (less openly discussed).			
Difficult to access health services, exacerbated by unpredictable, long and irregular working hours	Not resolved in project timeframe.	Mental health first aid course at a time and location convenient to fishers. Williamstown shed is suggested location. Special emphasis on inviting WAGs.	Local council?
Soft tissue injuries, musculoskeletal injuries (exacerbated by ageing), accidents, joint injuries	Physiotherapy / remedial massage made more available Not resolved in project timeframe.	Other mental health information (e.g. available as pamphlets from Beyond Blue), available at Williamstown shed, on notice boards at jetties and boat ramps. Information about physiotherapy and remedial massage to be made available to fishers.	Fisheries Victoria Local council?
Culture of working through illness and injury, and not having health checks	Not resolved in project timeframe.	A fisher health self-check form. Can be used by fishers to prompt seeking medical checks, or used in conjunction with mobile van health check (see below).	Cunningham Arm Medical Centre could help produce a general checklist for use at other sites?
Sun damage: skin cancer, cataracts	Information about dangers is available, preventative measures taken now, not in the past. Health services can treat, services not always accessed, especially by crew. General health checks to include skin checks (weird moles, etc.).	Fisher health check mobile van available for conducting check of basic health issues (e.g. blood pressure, mole checks, etc.). Service to be run in conjunction with VFARM meeting.	Could be funded by Workcover and/or Medicare Local?

Health Plan for fishers at site two

There are seven different types of fishery operating from Lakes Entrance. The Fishermen's Co-operative Society Limited has 69 shareholder members and services approximately 40 fishing vessels (a reduction of numbers of vessels occurred in 2005 when there was a Commonwealth buyout). The Co-op itself currently employs 20 full time and approximately 15 to 20 casual on-shore staff.¹ This plan draws on input from seven fishers (owners), a member of a fisher family, the Fishermen's Co-operative Society Limited, a local health service and the East Gippsland Shire Council, which is developing the Community Health and Well-being Plan 2014-2019.

Health and well-being issues	Existing actions, information, services and gaps	Actions to fill gaps	Who will act?	When will they act?
Stress and anxiety due to limited of control over short and medium term income and fish resources due to frequent changes to government regulations and quotas that appear not to consider fisher input, strict compliance, weather and the state of the bar. Affects skippers, crew, shore-based workers, families and small businesses reliant on the industry.	Some government and political advocacy, through Co-op Bar has been 'cleared' recently No mental health awareness or other mental health programs accessed by fishers	Larger, better targeted advocacy and awareness campaign for government, financiers and the public. Requires state and national coordination	State and national fishing bodies, e.g. National Seafood Industry ? Alliance, Seafood Industry Victoria	

¹ For more information see <http://www.leftrade.com.au/lefcol.html>

Family worry about fishers' dangerous work.					
Stigma associated with accessing mental health services	Not resolved in project timeframe.	Mental health first aid course at a time and location convenient to fishers. Co-op is suggested location.	Gippsland Lakes Community Health Centre can run courses. Should be included in Community Health and Well-being Plan. (GLCH no longer provides this training La Trobe Community Health now provides this training regionally.) UPDATE: LaTrobe Regional Hospital is the provider. LaTrobe Regional Hospital via Susanne Lampitt (Mental Health Promotion Officer) has provided details of websites that people can access in order to book a Mental Health First Aid instructor. 'They can look up courses planned for anywhere in Australia. https://www.mhfa.com.au/current_courses.php ; or locate facilitators that live in a particular postcode https://www.mhfa.com.au/instructor_list.php Also, most facilitators will run courses for workplaces, or in areas where there is a demand for one; so just because there isn't one planned, doesn't mean a course isn't in the pipeline. If the numbers are there, a course will be arranged; it's just a matter of finding a facilitator.' Email from Susanne Lampitt 10/7/2013	Course arranged by 31 July 2013	
Long hours, fatigue, irregular time off, cannot plan for a break	Not resolved in project timeframe.	Other mental health and information programs	Suggestions and comments from Medicare Local, East Gippsland Shire Council, Cunningham Arm Medical Centre can provide GP counselling as well as arrange formal psychology counselling. In LE and Bairnsdale and Gippsland Lakes Community Health Centre Co-op could distribute information and promote to members and employees. Should be included in Community Health and Well-being Plan.	Information circulated and courses arranged by July 2013	
Difficult to access health services, exacerbated by unpredictable, long and irregular working hours,	Not resolved in project timeframe.	Occupational Health and Safety inductions for new crew and refresher training for skippers and crew	Co-op could facilitate. Need to locate training provider and funding, Worksafe? GLCH are registered with Worksafe as Work Health Check providers. WHC will no longer be available after the 31 Dec 2013. GLCH have qualified allied health professionals with additional OHS quals who	Training provider located by August 2013	

				deliver OHS training to a variety of services regionally and are available to do so for any industry. We charge the cost of staffing to deliver. CAMC has an Occupational Physician who can support health assessments and review of working environment. This could be funded for individuals being referred by their GP if they have injuries or illness. The occupational workplace assessment would need to be funded from another source e.g. government, Co-Op or the Fishers themselves.	
Soft tissue musculoskeletal injuries (exacerbated by ageing), accidents	injuries, Not resolved in project timeframe.	Fisher health checks at flexible times. Flyers and posters promoting these	Cunningham Arm Medical Centre will make a targeted program available. Would Gippsland Lakes Community Health Centre do the same? Co-op could promote to members and employees. GLCH are registered with Worksafe as Work Health Check providers. WHC will no longer be available after the 31 Dec 2013. GLCH are able to deliver health checks. Clarification is required as to what is considered to be included in this Health check. Could be funded by WorkCover and/or Medicare Local? Should be included in Community Health and Well-being Plan.	Health check available by July 2013	
Culture of working through illness and injury, and not having health checks	Not resolved in project timeframe.	A fisher self- health check form that can be sent to the health services prior to appointments – may allow health centres to send people off for basic tests and schedule relevant allied health appointments	Comments from Cunningham Arm Medical Centre: health checks are funded by Medicare for individuals requiring care, but not for health assessments arranged for industries. Thus the self-health check would be most useful for fishers to trigger awareness of their own health and possible issues. This awareness could encourage them to make an appointment for a check-up. They could bring the self-health check form with them. If it is to be an industry-coordinated/sponsored health program, then the industry needs to arrange funding for the health checks. GLCH: Further clarification would be required, but there are many examples of self- assessment tools available that could be utilised for this type of assessment.	Form circulated to fishers by August 2013	
Sun damage: skin cancer, cataracts	Information about dangers is available, preventative measures	Physical fitness check for crew – to be used by skippers to ensure crew	Cunningham Arm Medical Centre: Pre-employment medicals are not supported, as they have not really been shown to reduce injuries, and they discriminate against some people getting employment. Regular medical/health check-ups are very important, particularly	Check developed August 2013	

	<p>taken now, not in the past.</p> <p>Health services can treat, services not always accessed, especially by crew.</p>	can cope with physical demands of the job	<p>in such a complex and dangerous industry. Advice and training for crew in health maintenance is also very important. Who can compile this? Compilation of a fishing industry occupational risk profile would be useful: e.g.: slips, falls, lifting/pushing/pulling, noise exposure, fumes, cold, heat, stress, sleep deprivation, shift work, enclosed spaces, chemicals, MSDSs, sun exposure etc.</p> <p>GLCH: We provide this service to other work sectors within the community. We currently employ two full time exercise Physiologists to complete these work fit checks.</p>	
Obesity, diabetes	Health services can treat, services not always accessed	Tool kit of available services for fishers	Co-op will disseminate. Could Medicare Local fund this? Should be included in Community Health and Well-being Plan.	Toolkit developed by August 2013
Alcohol and drug abuse, especially among crew	Not resolved in project timeframe.	Diabetes counselling, dentist, mental health professionals, GPs, other chronic disease management and prevention services at flexible times	<p>Cunningham Arm Medical Centre will - offer flexible times. Would Gippsland Lakes Community Health Centre do the same?</p> <p>GLCH do deliver after hour services for this reason. We have Thursday evening clinics with the Allied Health services available and Sat and Sun GP clinics.</p>	Flexible appointments available from June 2013

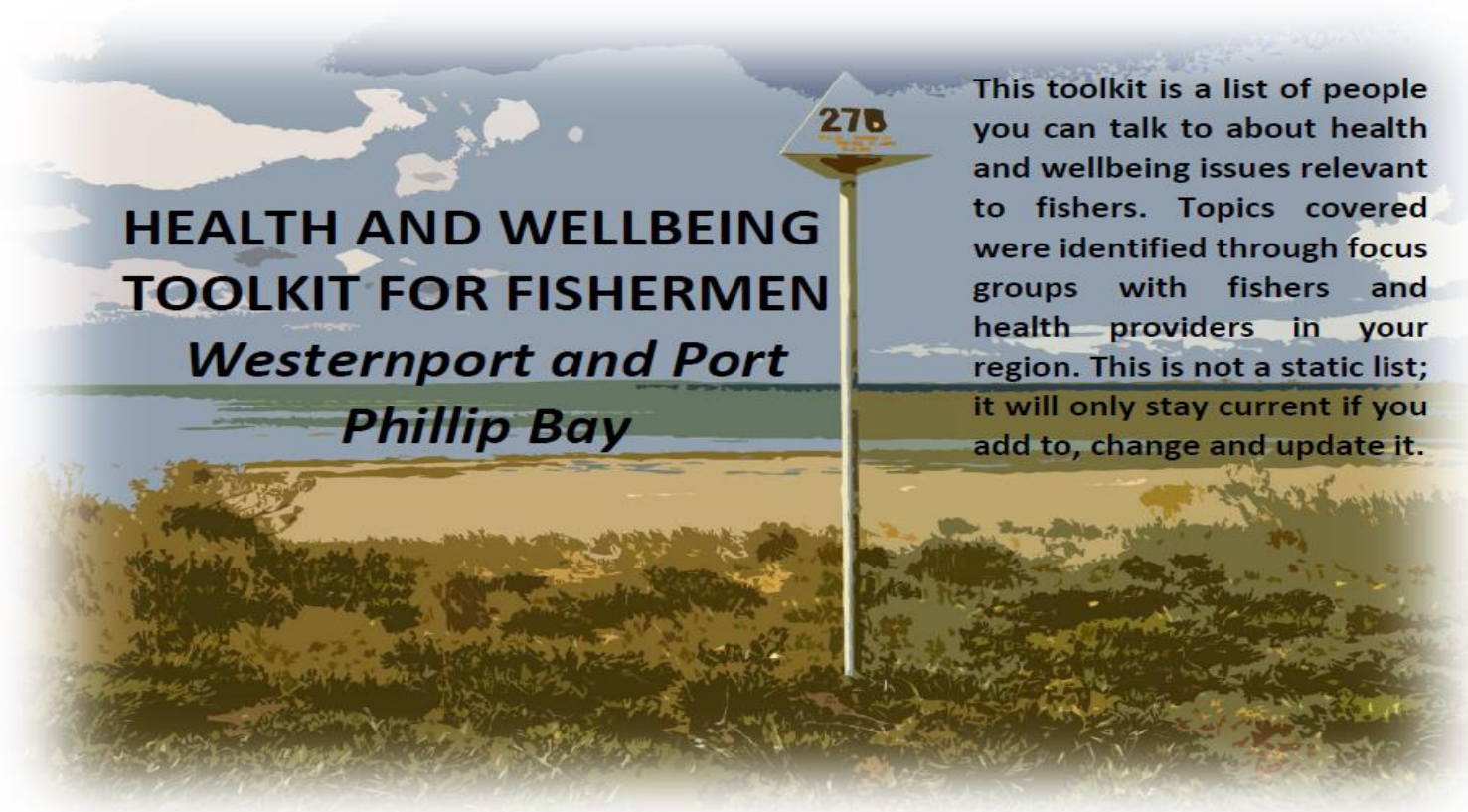
Health Plan for fishers at site three

The Midwest fishers who attended the group discussions at Northampton are part of the West Coast Rock Lobster (Managed) Fishery. The fishery operates between Shark Bay and Cape Leeuwin using baited traps (pots), with 279 vessels and 780 people engaged directly in fishing in 2010/11. The lobster catch is exported either live or frozen, as whole cooked or whole raw lobsters to Asia, the United States and Europe. There is also a small domestic market, mainly for whole cooked rock lobster.

Health and well-being issues	Existing actions, information, services, gaps	Actions to fill gaps	Who will act?
Mental health issues, including stress:			
There had been quite a bit of stress associated with the change in the quota system, the transition to which started three years ago. In the transition period there were six suicides and eighteen attempts.	Mental Health First Aid courses or Beyond Blue workplace visits can be arranged.	It was suggested that a 'fisher health check' mobile van would be optimal for conducting basic health checks e.g. blood pressure, mole checks, etc. Such a service could be run in conjunction with WAFIC and /or Medicare Local (Goldfields-Midwest).	WAFIC may see merit in having health checks, screening done as part of their Certificate of Competency programme. Role for Medicare Local?
Problems with succession planning. WA Stamp Duty made it very costly to try to transfer family businesses to sons or daughters.	Not resolved in project timeframe. Perhaps lobbying of local politicians by WAFIC could be arranged?		We will ask Medicare Local to liaise with Mary to pick a suitable time. Should be done quickly so we can assess it.
Stress/anxiety issues tended to be dealt with individually. Participants at the group discussion were aware of Beyond Blue and knew of the existence of a <i>Men's Shed</i> in Geraldton.	Whilst there is an awareness of bodies that provide information/services regarding mental health, it may be beneficial to have Medicare Local (Goldfields – Midwest) and beyondblue arrange visits locally.		
Physical health issues:			

<p>Injuries that arise from lifting craypots. Operating winches which lift the craypots can be dangerous.</p> <p>Injuries caused by fish hooks or hunks of lead tangled up with craypot lines. The hooks and lead weights are left by amateur fishers fishing around the craypots. Some of the lead weights can weigh in the vicinity of 1 kilo.</p>	<p>Enhanced awareness of OH&S advice about appropriate lifting?</p> <p>Advocate for signs to be put up in relation to this issue at local boat ramps/jetties.</p>	<p>Suggest a Productivity Commission review into value of licences constrained by output controls, and the impact on succession planning as an economic strategy for the industry.</p>	<p>We can put that in our report but like the mobile health check we can't assess it. We can only suggest that this is an issue worth following up. That alone may be beneficial to fishers in terms of acknowledging a source of their stress.</p>
<p>Diet, irregular sleep patterns and sea boils were identified as problems. Sea boils – ulcerated sores on arms, legs and hands- resulted from the action of sea water on abrasions, compounded by bad diet and poor personal hygiene.</p>	<p>Not resolved in project timeframe. Possible role for Dieticians, Doctors etc. connected with Medicare Local (Goldfields – Midwest).</p>	<p>Information about specific fisher problems put together in a 'tool-kit', and distributed to fishers.</p>	<p>Ask Medicare Local to put together the kits, including relevant information and material, and including a bowel cancer test kit, and have them made available for fishers to collect from Geraldton. We would ask Mary to send out a notice when these are available. We can track their collection as part of the assessment of the FRDC project actions.</p>
<p>Hearing loss due to engine noise.</p>	<p>There is general awareness of issue and ear protection is worn when going below decks. However, messages about hearing loss/safety should be reinforced.</p>	<p>Injuries caused by fish hooks or hunks of lead tangled up with craypot lines.</p>	<p>Signage put up at local jetties alerting recreational fishers to dangers of fishing near craypots. Approach made to local council by WAFIC and/or local professional fishers.</p>
<p>Skin cancers</p>	<p>There is good awareness of sun damage risks, with the provision of sunscreen on boats. Vigilance regarding the dangers of prolonged exposure to sun etc. needs to be maintained.</p>	<p>Not resolved in project timeframe.</p>	<p>Not resolved in project timeframe.</p>

Appendix 3 Project materials – Health tool-kit WPB and PPB



This toolkit is a list of people you can talk to about health and wellbeing issues relevant to fishers. Topics covered were identified through focus groups with fishers and health providers in your region. This is not a static list; it will only stay current if you add to, change and update it.

Health issues related to Stress

Stress is the greatest barrier to health and well-being in the fishing industry. The causes of this are plentiful: the dangerous environment in which fishers work; the financial concerns which go along with wild-catch fishing and a variable market; unpredictable management arrangements, including closures; clashes with recreational fishers; the uncertain value of fishing concessions in an output controlled fishery. The results can be devastating: heightened anxiety and depression; substance abuse; weight loss or over-eating; hair-loss, arguments at home and relationship break-down; suicidal thoughts, self-harm, suicide attempts and successful suicides. The contacts in this toolkit will not fix the causes of stress, but they will help you address the very real affects. Mental fitness is vital to physical resilience, and it is a top priority to keep both your body and your mind in good shape. Remember, stress is the issue identified by many fishers as the biggest hurdle to achieving good health and well-being; address the causes, but don't forget to seek attention for any problems.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
WESTERNPORT				
Mission to Seafarers: Hastings Provides on shore hospitality when you're away from your family for long periods.	Eddie Tearle	03 5979 4327	hastings@mts.org.au	http://www.mts.org.au/hastings.html
Mornington Men's Shed A friendly place where you can work on meaningful projects at your own pace in your own time in the company of other men. It's all about your well-being and health.	Paul Howard	03 5975 4136	N/A	http://www.mensshed.org/Find-A-Shed/.aspx?search=hastings&distance=25&filter=-1
Westernport Men's Shed: A friendly place where you can work on meaningful projects at your own pace in your own time in the company of other men. It's all about your well-being and health.	Terry Kelly	03 5979 1969	WPMSHED@bigpond.com	http://www.mensshed.org/Find-A-Shed/.aspx?search=hastings&distance=25&filter=-1
Men's Helpline Service dedicated to men with family and relationship issues.	Switchboard operator	1300789 978	Phone only	http://www.mensline.org.au
Beyond Blue 24/7 telephone support service for people suffering anxiety, depression or a related disorder.	Switchboard operator	1300224 636	Phone only	http://www.beyondblue.org.au/
Lifeline 24/7 crisis support and suicide prevention telephone based service	Switchboard operator	131114	Phone only	http://www.lifeline.org.au/
M.E.N.S. - Men Exploring Non-Violent Solutions Behaviour change groups for men who have been violent or controlling towards family members and want to change.	Switchboard operator	1300 665 781	N/A	http://www.peninsulahealth.org.au
Westernport Community Support Crisis counselling; advocacy, information and referral; emergency relief	John Fraser	03 5979 2762	info@wportcomsupport.org.au	http://www.wportcomsupport.org.au

Health issues related to Stress (cont'd)

South Peninsula Community Support and Information Centre Advocacy and Negotiation; Assessment and Referral; Bond Assistance Applications; Community Information; Crisis Support; Emergency Relief; Access to Legal Aid; Low Income Support Service; Needle Exchange Program; No Interest Loan Scheme; Personal Counselling ; Tax Help	Jackie Currie	03 5986 1285	admin@spsic.org	http://www.datascape.com.au/se/rvic/se.asp?pg=details&ss=y&st=aaz&sl=S&esn=24557
DrugInfo Line A service provided by the Australian Drug Foundation that offers information about prevention of use of alcohol and other drugs.	Switchboard operator	1300 858 584	N/A	http://www.druginfo.adf.org.au/contact-numbers/help-and-support
Family Drug Helpline: We offer family members support, information, education, inspiration and the encouragement to practise self-care.	Switchboard operator	1300 660 068	N/A	http://www.familydrughelp.org.au/
Alcoholics Anonymous: Hastings Support group to solve the common problem of alcohol addiction.	Switchboard operator	03 9428 9101	aavictoria@bigpond.com	http://www.aavictoria.org.au
Alcoholics Anonymous: Mornington Support group to solve the common problem of alcohol addiction.	Switchboard operator	1300880390	aapeninsuladistrict@gmail.com	http://www.aavictoria.org.au
Beleura Clinic - Alcohol Recovery Program Hospital with alcohol recovery program. Also offers mental health and orthopaedic services.	Mr. Campbell Green	03 5978 8224	Initial contact by phone	http://www.beleuraprivate.com.au/Alcohol-Rehab/the-beleura-clinic-team.aspx
Needle and Syringe program - Rosebud Service that provides free needles, syringes and condoms.	Jackie Currie	03 5986 1285	admin@spsic.org	http://www.datascape.com.au/infocomse/mcisc/search.cfm?Page=Details&SS=yes&DIL=no&LP=Details&IT=A&Opt=Agency&Type=AgencyAZ&Letter=N&EntrySN=54039&All=All
Needle and Syringe program - Mornington Service that provides free needles, syringes and condoms.	Reception: Mornington Community and Information Centre	03 5975 1644	N/A	http://www.serviceseeker.com.au/iss/cgi-bin/wdb.cgi/VIC/service/query?id=65289
PenDAP- Peninsula Drug and Alcohol program - Rosebud Offers services to help people who are having problems because of their alcohol and/or drug use.	Switchboard operator	1300 665 781	N/A	http://www.peninsulahealth.org.au
Narcotics Anonymous Victoria General number to call to find a support group in your local area.	Switchboard operator	03 9525 2833	Phone only, no direct email contact	http://www.navic.net.au/meetings/

Health issues related to Stress

Stress is the greatest barrier to health and well-being in the fishing industry. The causes of this are plentiful: the dangerous environment in which fishers work; the financial concerns which go along with wild-catch fishing and a variable market; unpredictable management arrangements, including closures; clashes with recreational fishers; the uncertain value of fishing concessions in an output controlled fishery. The results can be devastating: heightened anxiety and depression; substance abuse; weight loss or over-eating; hair-loss, arguments at home and relationship break-down; suicidal thoughts, self-harm, suicide attempts and successful suicides. The contacts in this toolkit will not fix the causes of stress, but they will help you address the very real affects. Mental fitness is vital to physical resilience, and it is a top priority to keep both your body and your mind in good shape. Remember, stress is the issue identified by many fishers as the biggest hurdle to achieving good health and well-being; address the causes, but don't forget to seek attention for any problems.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
PORT PHILLIP/GEELONG				
Mission to Seafarers Geelong Provides on shore hospitality for seamen who are away from family for long periods.	Rev. Noah Park	03 5278 6985	geelong@mts.org.au	http://www.mts.org.au/geelong.html
Men's Shed: Hobsons Bay A friendly place where you can work on meaningful projects at your own pace in your own time in the company of other men. It's all about your well-being and health.	Laraine Hill	03 9398 2383	secretary.hobsonsnet@gmail.com	http://www.mensshed.org/Find-A-Shed/.aspx?search=geelong&distance=50&filter=-1
Men's Shed: St Leonards A friendly place where you can work on meaningful projects at your own pace in your own time in the company of other men. It's all about your well-being and health.	Ken Alexander	03 5257 3880	Alexandertate@bigpond.com	http://www.mensshed.org/Find-A-Shed/.aspx?search=geelong&distance=50&filter=-1
Men's Shed: Geelong Community A friendly place where you can work on meaningful projects at your own pace in your own time in the company of other men. It's all about your well-being and health.	Barry Sproull	0457643332	gmensshed@gmail.com	http://www.mensshed.org/Find-A-Shed/.aspx?search=geelong&distance=50&filter=-1
Men's Shed: Clifton Springs A friendly place where you can work on meaningful projects at your own pace in your own time in the company of other men. It's all about your well-being and health.	David Cornwell	0459213153	cscmensshed@gmail.com	http://www.mensshed.org/Find-A-Shed/.aspx?search=geelong&distance=50&filter=-1
DrugInfo Line A service provided by the Australian Drug Foundation that offers information about alcohol and other drugs and the prevention of related harms.	Switchboard operator	1300 858 584	Phone only	http://www.druginfo.adf.org.au/contact-numbers/help-and-support

Health issues related to Stress (cont'd)

Family Drug Helpline We offer family member's support, information, education, inspiration and the encouragement to practise self-care.	Switchboard operator	1300 660 068	Phone only	http://www.familydrughelp.org.au/
Narcotics Anonymous Victoria General number to call to find a support group in your local area.	Switchboard operator	03 9525 2833	Phone only	http://www.navic.net.au/meetings/
Men's Helpline Service dedicated to men with family and relationship issues.	Switchboard operator	1300 789 978	Phone only	http://www.mensline.org.au
Beyond Blue 24/7 telephone support service for people suffering anxiety, depression or a related disorder.	Switchboard operator	1300 224 636	Phone only	http://www.beyondblue.org.au/
Lifeline 24/7 crisis support and suicide prevention telephone based service	Switchboard operator	131114	Phone only	http://www.lifeline.org.au/
Alcoholics Anonymous: Geelong Support group to solve the common problem of alcohol addiction.	Switchboard operator	(03) 5229 1710	Phone only	http://aatimes.org.au/meetings/l/Geelong

Bruises, Bumps and Scrapes: Short term physical health issues

Serious injuries, such as cuts, crush injuries or strains, tend to be addressed immediately through a visit to the hospital, or a couple of pain-killers, and tablespoon of 'harden-up' and a lie-down. However, a speedy and lasting recovery can be better assured if you properly care for any wounds or strains as they happen. Recurring injuries – torn stitches, aches caused by compensating for other pains – can slow your operation more than taking the time to heal properly in the first place.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
WESTERNPORT				
Phillip Island Medical Group: Cowes Men's health services including GP, Optometrist, psychologists, urologists,	Practice switchboard	03 5951 1800	N/A	http://www.pimg.com.au
Phillip Island Medical Group: San Remo Men's health services including GP, Optometrist, psychologists, urologists,	Practice switchboard	03 5678 5402	N/A	http://www.pimg.com.au
Mornington Community Health Wide range of medical services from GPs to specialist services	Central switchboard	1300 665 781	N/A	www.peninsulahealth.org.au
Peninsula Community Health Service: Hastings wide range of medical services from GPs to specialist services	Central switchboard	03 5971 9100	N/A	www.peninsulahealth.org.au
Peninsula Physical Health and Nutrition Psychologists, podiatry, diabetes management, dietetics,	Kate Save	03 5974 1011		http://www.healthandnutrition.com.au/
Peninsula Pilates Studio		03 5973 5511	info@psmgroupp.com.au	www.psmgroup.com.au
Mornington Central Physiotherapy Remedial massage, Pilates, musculoskeletal and sports physio services as well as orthopaedic rehabilitation.	Clinton Watson	03 5973 5511	info@psmgroupp.com.au	www.psmgroup.com.au
MPSports Physicians Specialised in sports and exercise medicine as well as nutrition.	Dr. Greg Harris	03 5975 4255		www.mpsportsphysicians.com.au

Bruises, Bumps and Scrapes: Short term physical health issues

PORT PHILLIP/GEELONG

Drysdale Physiotherapy and Sports Injury Clinic Remedial massage, Pilates, musculoskeletal and sports physio services as well as orthopaedic rehabilitation.	Switchboard	03 5251 2958		
Bellarine Allied Health Group (Ocean Grove) Osteopath, Dietician, Psychologist.	Switchboard	03 5256 3642	contact@bellarinealliedhealth.com.au	http://bellarinealliedhealth.com.au
Portside Physiotherapy (Portarlington) Remedial massage, Pilates, musculoskeletal and sports physio services as well as orthopaedic rehabilitation.	Elena Hobson	03 5259 1277	admin@portsidephysiotherapy.com.au	http://www.portsidephysiotherapy.com.au/
All Matters Physiotherapy (Portarlington) Back and neck pain, muscle and joint pain, headaches, sports injuries,	Emma Zahl	03 5259 2968	info@allmattersphysio.com.au	http://www.allmattersphysio.com.au
Williamstown Physiotherapy Back and neck pain, muscle and joint pain, headaches, sports injuries, Pilates	Matthew Brewer	03 9397 7711	info@williamstownphysiotherapy.com.au	http://www.williamstownphysiotherapy.com.au/
Physiohealth (Williamstown) myotherapists, masseurs, Pilates instructors and dieticians		03 9397 4977	info@physiohealth.com.au	http://www.physiohealth.com.au/
Williamstown Osteopathy Osteopathy, Pilates, Myotherapy	Receptionist	03 9397 8877	N/A	http://www.williamstownosteo.com.au/

Issues relating to prolonged exposure to the sun

Sun health awareness in Australia is terrific, due in part to government awareness campaigns such as Slip, Slop, Slap. It is important to remain vigilant about sun-related injuries, such as sun-burn, skin-cancers and eye damage. Organise for yourself, and your deckies, to have regular skin-cancer checks, and be sure to schedule an appointment with your doctor AS SOON AS you notice any worrying changes.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
WESTERNPORT				
Cancer Council Victoria Help Line Initial contact point for people with cancer. Able to provide details of specialist cancer practitioners although you might need to see a GP first.	Central switchboard	13 11 20	N/A	http://www.cancervic.org.au/
Phillip Island Medical Group: San Remo Skin cancer management	Practice switchboard	03 5678 5402	N/A	http://www.pimg.com.au
Phillip Island Medical Group: Cowes Skin cancer management	Practice switchboard	03 5951 1800	N/A	http://www.pimg.com.au

Issues relating to prolonged exposure to the sun

PORT PHILLIP/GEELONG

Cancer Council Victoria Help Line Initial contact point for people with cancer. Able to provide details of specialist cancer practitioners although you might need to see a GP first.	Central switchboard	13 11 20	N/A	http://www.cancervic.org.au/
Fitzgerald Optometry (Williamstown) Eye testing, prescription sunglasses, glaucoma, cataracts	Dr John Fitzgerald	03 9397 6031	enquiry@fitzgeraldoptometry.com.au	http://www.fitzgeraldoptometry.com.au/contact_us
Eyecare Plus Optometrists (Drysdale) Eye testing, prescription sunglasses, glaucoma, cataracts	Dr Neil Roche	03 5253 1313	drysdale@eyecareplus.com.au	http://www.eyecareplus.com.au/drysdale/index.htm

Aches and Pains (persistent or long term injuries)

Chronic pain is something many fishers think they have to endure. Back-pain from heavy lifting, joint soreness from years working on unstable decks, repetitive stress injuries, and the like, are often dismissed as a bad case of O.L.D. Working pain-free, however, is something we are all entitled to, and which tends to make for happier skippers and more attentive deckies! Invest in your most valuable tool – your body and those of your crew – by addressing ongoing aches and pains.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
WESTERNPORT				
Phillip Island Medical Group: Cowes Men's health services including GP, Optometrist, psychologists, urologists,	Practice switchboard	03 5951 1800	N/A	http://www.pimg.com.au
Phillip Island Medical Group: San Remo Men's health services including GP, Optometrist, psychologists, and urologists	Practice switchboard	03 5678 5402	N/A	http://www.pimg.com.au
Mornington Community Health Wide range of medical services from GPs to specialist services	Central switchboard	1300 665 781	N/A	www.peninsulahealth.org.au
Peninsula Community Health Service: Hastings wide range of medical services from GPs to specialist services	Central switchboard	03 5971 9100	N/A	www.peninsulahealth.org.au
Peninsula Physical Health and Nutrition Psychologists, podiatry, diabetes management, dietetics,	Kate Save	03 5974 1011		http://www.healthandnutrition.com.au/
Peninsula Pilates Studio		03 5973 5511	info@psmgroup.com.au	www.psmgroup.com.au
Mornington Central Physiotherapy Remedial massage, pilates, musculoskeletal and sports physio services as well as orthopaedic rehabilitation.	Clinton Watson	03 5973 5511	info@psmgroup.com.au	www.psmgroup.com.au
MPSports Physicians Specialised in sports and exercise medicine as well as nutrition.	Dr. Greg Harris	03 5975 4255		www.mpsportsphysicians.com.au

Aches and Pains (persistent or long term injuries)

PORT PHILLIP/GEELONG

Drysdale Physiotherapy and Sports Injury Clinic Remedial massage, pilates, musculoskeletal and sports physio services as well as orthopaedic rehabilitation.	Switchboard	03 5251 2958		
Bellarine Allied Health Group (Ocean Grove) Osteopath, Dietician, Psychologist.	Switchboard	03 5256 3642	contact@bellarinealliedhealth.com.au	http://bellarinealliedhealth.com.au
Portside Physiotherapy (Portarlington) Remedial massage, pilates, musculoskeletal and sports physio services as well as orthopaedic rehabilitation.	Elena Hobson	03 5259 1277	admin@portsidephysiotherapy.com.au	http://www.portsidephysiotherapy.com.au/
All Matters Physiotherapy (Portarlington) Back and neck pain, muscle and joint pain, headaches, sports injuries,	Emma Zahl	03 5259 2968	info@allmattersphysio.com.au	http://www.allmattersphysio.com.au
Williamstown Physiotherapy Back and neck pain, muscle and joint pain, headaches, sports injuries, pilates	Matthew Brewer	03 9397 7711	info@williamstownphysiotherapy.com.au	http://www.williamstownphysiotherapy.com.au/
Physiohealth (Williamstown) myotherapists, masseurs, pilates instructors and dieticians		03 9397 4977	info@physiohealth.com.au	http://www.physiohealth.com.au/
Williamstown Osteopathy Osteopathy, Pilates, Myotherapy	Receptionist	03 9397 8877	N/A	http://www.williamstownosteo.com.au/

Health issues relating to diet

A poor diet can contribute to a multitude of health issues, from diabetes, to haemorrhoids, to obesity and sea boils. Making sure you get enough fruit and vegetables can be difficult if you are working unusual hours. Single men are more susceptible to poor eating habits than those with wives and partners who prepare family meals on land. Establishing strategies to ensure a healthy diet can improve your health and well-being both in the short and long-term.

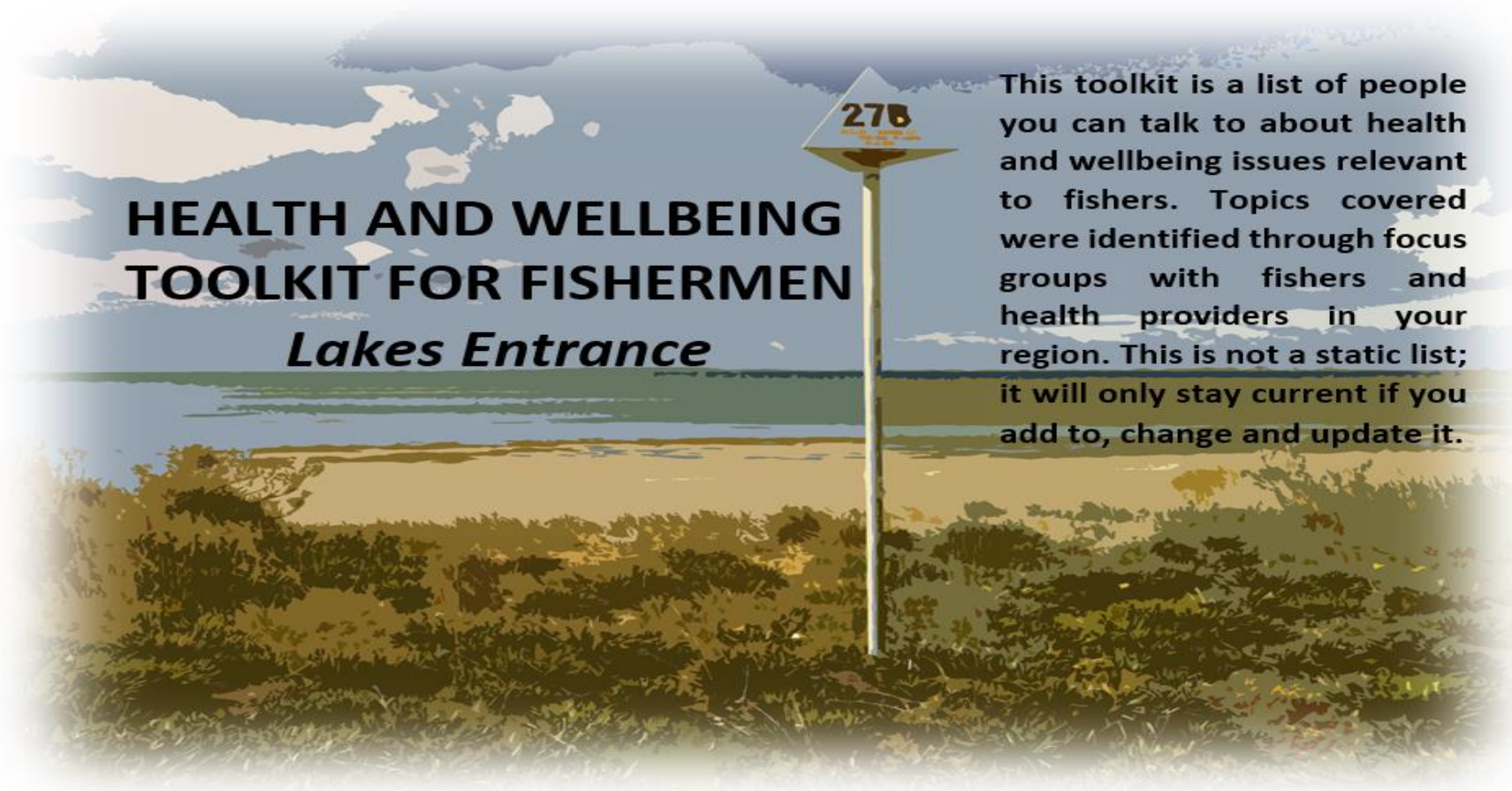
ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
Nutrition Australia Website This is a website with ideas for eating better food.	N/A	N/A	N/A	http://www.nutritionaustralia.org/national/resource/healthy-living-pyramid
Men's Health website This is a website with ideas for eating better food.	N/A	N/A	N/A	http://www.menshealth.co.uk/food-nutrition/healthy-recipes/
CSIRO Well-being diet This is a website with ideas for eating better food.	N/A	N/A	N/A	http://www.csiro.au/Outcomes/Health-and-Well-being/Prevention/Total-Well-being-Diet.aspx
Bowelscreen BowelScreen Australia® is a pharmacy-based bowel cancer awareness, education and screening program for the Australian community using a clinically proven, sensitive and reliable immunochemical faecal occult blood test.	Central switchboard	1800 555 494	N/A	http://www.bowelcanceraustralia.org/bca/index.php?option=com_content&view=article&id=145&Itemid=298

Government provided assistance

The Australian government provides a range of services to support with the maintenance of good health. This also includes financial support as well as physical and mental health related support services. A lot of the Help Lines referred to in other sections of this tool kit also provide starting points for support with matters relating to financial assistance.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
Centrelink: Point of service for a range of government payments and services.	Call centre	132 850	N/A	http://www.humanservices.gov.au/
Medicare: point of service for public health system related issues.	Call centre	132 011	medicare@humanservices.gov.au	http://www.humanservices.gov.au/
Department of Health Services Financial Information Services: A free, confidential service that provides education and information on financial and lifestyle issues to all Australians.	Call centre	132 300	N/A	http://www.humanservices.gov.au/customer/services/centrelink/financial-information-service

Appendix 4 Project materials – Health tool-kit Lakes Entrance



This toolkit is a list of people you can talk to about health and wellbeing issues relevant to fishers. Topics covered were identified through focus groups with fishers and health providers in your region. This is not a static list; it will only stay current if you add to, change and update it.

Health issues related to stress

Stress is the greatest barrier to health and well-being in the fishing industry. The causes of this are plentiful: the dangerous environment in which fishers work; the financial concerns which go along with wild-catch fishing and a variable market; unpredictable management arrangements, including closures; clashes with recreational fishers; the uncertain value of fishing concessions in an output controlled fishery. The results can be devastating: heightened anxiety and depression; substance abuse; weight loss or over-eating; hair-loss, arguments at home and relationship break-down; suicidal thoughts, self-harm, suicide attempts and successful suicides. The contacts in this toolkit will not fix the causes of stress, but they will help you address the very real affects. Mental fitness is vital to physical resilience, and it is a top priority to keep both your body and your mind in good shape. Remember, stress is the issue identified by many fishers as the biggest hurdle to achieving good health and well-being; address the causes, but don't forget to seek attention for any problems.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
The Men's Shed: Lakes Entrance A friendly place where you can work on meaningful projects at your own pace in your own time in the company of other men. It's all about your well-being and health.	Brett Hargreaves	035155 8370	brettha@glch.org.au	http://www.mensshed.org/Find-A-Shed/.aspx?search=lakes+entrance&distance=25&filter=-1
The Men's Shed: Paynesville A friendly place where you can work on meaningful projects at your own pace in your own time in the company of other men. It's all about your well-being and health.	Kevin Svenson	035156 7938	pvlleshed@gmail.com	http://www.mensshed.org/Find-A-Shed/.aspx?search=lakes+entrance&distance=25&filter=-2
Alcohol and Drug Information Service: Health Victoria Direct line for alcohol and drug information.	N/A	1800 888 236	Phone only	http://www.health.vic.gov.au/aod/directline.htm
Lifeline 24/7 crisis support and suicide prevention telephone based service.	Switchboard operator	13 11 14	Phone only	http://www.lifeline.org.au/
Alcoholics Anonymous: Lakes Entrance Support group to solve the common problem of alcohol addiction.	N/A	Helpline	Phone only	http://www.aa.org.au/findameeting/meetingdetails.php?mode=V&sel_id=1431&search_region=&s_region=16&s_day=&s_period=&page=4
Gippsland Lakes Community Health Alcohol and Drug Services: Lakes Entrance GLCH community counselling and support service.	Practice switchboard	035155 8300	contact@glch.org.au	http://www.glch.org.au/services/counselling-and-support/alcohol-and-drug-services

Health issues related to stress (cont'd)

Beyond Blue 24/7 telephone support service for people suffering anxiety, depression or a related disorder.	Switchboard operator	1300 224 636	Phone only	http://www.beyondblue.org.au/
Gippsland Lakes Community Health Family Counselling: Lakes Entrance GLCH community counselling and support service.	Practice switchboard	035155 8300	contact@glch.org.au	http://www.glch.org.au/services/counselling-and-support/family-counselling
Gippsland Lakes Community Health Men's Behavioural Change Program: Bairnsdale Men's specific program provided by GLCH.	Practice switchboard	035152 0052	contact@glch.org.au	http://www.glch.org.au/services/counselling-and-support/mens-behavioural-change-program
Men's Helpline Service dedicated to men with family and relationship issues.	Switchboard operator	1300 789 978	Phone only	http://www.mensline.org.au/Home.html

Bruises, Bumps and Scrapes: Short term physical health issues

Serious injuries, such as cuts, crush injuries or strains, tend to be addressed immediately through a visit to the hospital, or a couple of pain-killers, and tablespoon of 'harden-up' and a lie-down. However, a speedy and lasting recovery can be better assured if you properly care for any wounds or strains as they happen. Recurring injuries – torn stitches, aches caused by compensating for other pains – can slow your operation more than taking the time to heal properly in the first place.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
Gippsland Lakes Community Health: Visiting Osteopath Hands-on manual therapy to treat musculoskeletal and related disorders including back pain, neck pain, headaches, sciatica, joint pain and stiffness.	Marcus Schafer	03 5154 2777 OR 03 5155 8300 (Fridays)	N/A	http://www.glch.org.au/services/allied-health/visiting-osteopath
Gippsland Lakes Community Health: Physiotherapy Individual consultations treat a wide range of musculoskeletal, neurological and cardiothoracic disorders.	N/A	03 5155 8367	N/A	http://www.glch.org.au/services/allied-health/physiotherapy
Gippsland Lakes Community Health: Podiatrist The Podiatrist provides service to clients with foot pathology that has created lower limb risk, for example: diabetes, ulceration, vascular disease, neuropathy, Rheumatoid arthritis, acute skin or nail lesions.	Amanda Hack	03 5155 8367	N/A	http://www.glch.org.au/services/allied-health/podiatrist

Issues relating to prolonged exposure to the sun

Sun health awareness in Australia is terrific, due in part to government awareness campaigns such as Slip, Slop, Slap. It is important to remain vigilant about sun-related injuries, such as sun-burn, skin-cancers and eye damage. Organise for yourself, and your deckies, to have regular skin-cancer checks, and be sure to schedule an appointment with your doctor AS SOON AS you notice any worrying changes.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
Gippsland Melanoma and Skin Cancer Clinic Gippsland Melanoma and Skin Cancer Clinic is a dedicated specialist skin cancer service run from Fitzpatrick House in Sale by Mr. Adrian Aitken MBBS PhD FRACS for the detection, diagnosis and treatment of all skin cancers including melanomas, squamous cell cancers and basal cell skin cancers.	Reception	03 5144 4555	N/A	http://www.gippslandmelanoma.com.au/
Cancer Council Victoria Help Line Initial contact point for people with cancer. Able to provide details of medical practitioners that specialise in cancer treatment although most need to go to a GP first.	Central switchboard	13 11 20	N/A	http://www.cancervic.org.au/

Aches and Pains (persistent or long term injuries)

Chronic pain is something many fishers think they have to endure. Back-pain from heavy lifting, joint soreness from years working on unstable decks, repetitive stress injuries, and the like, are often dismissed as a bad case of O.L.D. Working pain-free, however, is something we are all entitled to, and which tends to make for happier skippers and more attentive deckies! Invest in your most valuable tool – your body and those of your crew – by addressing ongoing aches and pains.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
Gippsland Lakes Community Health: Visiting Osteopath Hands-on manual therapy to treat musculoskeletal and related disorders including back pain, neck pain, headaches, sciatica, joint pain and stiffness.	Marcus Schafer	03 5154 2777 OR 03 5155 8300 (Fridays)	N/A	http://www.glch.org.au/services/allied-health/visiting-osteopath
Gippsland Lakes Community Health: Physiotherapy Individual consultations treat a wide range of musculoskeletal, neurological and cardiothoracic disorders.	N/A	03 5155 8367	N/A	http://www.glch.org.au/services/allied-health/physiotherapy
Gippsland Lakes Community Health: Podiatrist The Podiatrist provides service to clients with foot pathology that has created lower limb risk, for example: diabetes, ulceration, vascular disease, neuropathy, Rheumatoid arthritis, acute skin or nail lesions.	Amanda Hack	03 5155 8367	N/A	http://www.glch.org.au/services/allied-health/podiatrist

Health issues relating to diet

A poor diet can contribute to a multitude of health issues, from diabetes, to haemorrhoids, to obesity and sea boils. Making sure you get enough fruit and vegetables can be difficult if you are working unusual hours. Single men are more susceptible to poor eating habits than those with wives and partners who prepare family meals on land. Establishing strategies to ensure a healthy diet can improve your health and well-being both in the short and long-term.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
Gippsland Lakes Community Health Diabetes Education: Gippsland Lakes Community Health provides a comprehensive diabetes care service. Qualified diabetes educators in collaboration with general practitioners and other health care professionals provide diabetes education and individual diabetes management plans as required.	Medical switchboard	03 5155 8300	N/A	http://www.glch.org.au/services/allied-health/diabetes-education
Gippsland Lakes Community Health Living Well with Diabetes: Bairnsdale This program runs for eight weeks with two sessions per week. Living Well with Diabetes provides clients with information, guidance and support to enable them to manage their disease.	Aged and Community	03 5155 8367	N/A	http://www.glch.org.au/services/counselling-and-support/living-with-diabetes
Gippsland Lakes Community Health Dietitians: The Dietitian offers nutrition advice, education and management for people with high risk, complex and specific disease states.	Health service access	03 5155 8367	N/A	http://www.glch.org.au/services/allied-health/dietitian
Bowelscreen: BowelScreen Australia® is a pharmacy-based bowel cancer awareness, education and screening program for the Australian community using a clinically proven, sensitive and reliable immunochemical faecal occult blood test.	Central switchboard	1800 555 494	N/A	http://www.bowelcanceraustralia.org/bca/index.php?option=com_content&view=article&id=145&Itemid=298

Government provided assistance

The Australian government provides a range of services to support with the maintenance of good health. This also includes financial support as well as physical and mental health related support services. A lot of the Help Lines referred to in other sections of this tool kit also provide starting points for support with matters relating to financial assistance.

ORGANISATION	CONTACT NAME	TELEPHONE	EMAIL	WEB ADDRESS
Centrelink: Point of service for a range of government payments and services.	Call centre	132 850	N/A	http://www.humanservices.gov.au/
Medicare: point of service for public health system related issues.	Call centre	132 011	medicare@humanservices.gov.au	http://www.humanservices.gov.au/
Department of Health Services Financial Information Services: A free, confidential service that provides education and information on financial and lifestyle issues to all Australians.	Call centre	132 300	N/A	http://www.humanservices.gov.au/customer/services/centrelink/financial-information-service

References

- ABS. (2011). National Regional Profile 2007-2011 Retrieved 6 February, 2014, from <http://www.ausstats.abs.gov.au/ausstats/nrmaps.nsf/NEW+GmapPages/national+regional+profile?opendocument>
- Acheson, J. M. (1981). Anthropology of Fishing. *Annual Review of Anthropology*, 10, 275-316. doi: 10.2307/2155719
- Allen, P., Wellens, B., & Smith, A. (2010). Fatigue in British fishermen. *International Maritime Health*, 62(3), 154-158.
- Bartley, M. (2005). Job insecurity and its effect on health. *Journal of Epidemiology and Community Health*, 59(9), 718-719. doi: 10.1136/jech.2004.032235
- Benavides, F. G., & Delclos, G. L. (2005). Flexible employment and health inequalities. *Journal of Epidemiology and Community Health*, 59(9), 719-720. doi: 10.1136/jech.2004.032227
- Binkley, M. (1995). *Risks, dangers, and rewards in the Nova Scotia offshore fishery* Quebec City: McGill-Queens University Press.
- Brooks, K. (2011). Health and Safety in the Australian Fishing Industry (pp. ii-xiii, 1-101). Barton, ACT: Rural Industries Research and Development Corporation.
- Burgard, S. A., Brand, J. E., & House, J. S. (2009). Perceived job insecurity and worker health in the United States. *Social Science & Medicine*, 69(5), 777-785. doi: <http://dx.doi.org/10.1016/j.socscimed.2009.06.029>
- Butterworth, P., Leach, L. S., Strazdins, L., Olesen, S. C., Rodgers, B., & Broom, D. H. (2011). The psychosocial quality of work determines whether employment has benefits for mental health: results from a longitudinal national household panel survey. *Occupational and Environmental Medicine*, 68(11), 806-812. doi: 10.1136/oem.2010.059030
- Carruthers, S., Boots, K., & Midford, R. (2002). Perceived and self-reported licit and illicit drug use among fishing industry workers on the mid-north coast of Western Australia. *Drug and Alcohol Review*, 21(4), 357-361.
- Chudleigh, P., & Simpson, S. (2009). *Collaborative Partnership for Farming and Fishing Health and Safety: Research and Development Plan 2008-2012* Barton, ACT: Rural Industries Research and Development Corporation.
- de Witte, H. (2005). Job Insecurity: Review of the international literature on definitions, prevalence, antecedents and consequences. *South African Journal of Industrial Psychology*, 31(4), 1-6.
- Dwyer, P. D., King, T. J., & Minnegal, M. (2008). Managing shark fishermen in southern Australia: A critique. *Marine Policy*, 32(3), 263-273.
- Dwyer, P. D., & Minnegal, M. (2006a). Dignity or disgrace? The (latest) mismanagement of Commonwealth fisheries. *Ausmarine*, July 16-17.
- Dwyer, P. D., & Minnegal, M. (2006b). The Good, the Bad and the Ugly: Risk, Uncertainty and Decision-Making by Victorian Fishers. *Journal of Political Ecology*, 131-23.
- Evans, A. R., Tait, R., Harvey, P., & Newbury, J. (2005). Recreational drug use within the employees of the mariculture and seafood industry in South Australia. *Drug and Alcohol Review*, 24(1), 67-68.
- Ferrie, J. E., Shipley, M. J., Stansfeld, S. A., & Marmot, M. G. (2002). Effects of chronic job insecurity and change in job security on self reported health, minor psychiatric morbidity, physiological measures, and health related behaviours in British civil servants: the Whitehall II study. *Journal Of Epidemiology And Community Health*, 56(6), 450-454.
- Goetzel, R. Z., Gibson, T. B., Short, M. E., Chu, B.-C., Waddell, J., Bowen, J., . . . Wilson, M. G. (2010). A multi-worksites analysis of the relationships among body mass index, medical utilization, and worker productivity. *Journal of occupational and environmental medicine*, 52(Suppl 1), S52-58.
- Greenwood, D. J., & Levin, M. (2000). Reconstructing the relationships between universities and society through action research. In N. K. Denzin & J. M. Lincoln (Eds.), *Handbook of qualitative research Second Edition* (pp. 85-106). Thousand Oaks: Sage.

- Hartley, J., Jacobson, D., Klandermans, B., & van Vuuren, T. (1991). *Job insecurity: Coping with jobs at risk*. London: Sage.
- Heaney, C. A., Israel, B. A., & House, J. S. (1994). Chronic job insecurity among automobile workers: Effects on job satisfaction and health. *Social Science & Medicine*, 38(10), 1431-1437. doi: [http://dx.doi.org/10.1016/0277-9536\(94\)90281-X](http://dx.doi.org/10.1016/0277-9536(94)90281-X)
- Heetveld, M., de Visser, W., Veerman, D., Bilo, H., & van Montfrans, G. (2001). Increased risk of heart and vascular diseases in fisherman from Urk. *Ned Tijdschr Geneesk*, 136(26), 1251-1255.
- Hellgren, J., & Sverke, M. (2003). Does job insecurity lead to impaired well-being or vice versa? Estimation of cross-lagged effects using latent variable modelling. *Journal of Organizational Behavior*, 24(2), 215-236. doi: 10.1002/job.184
- Huberman, A. M., & Miles, M. B. (1994). Data management and analysis methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 428-444). London: Sage Publications.
- Johnson, D. G., Formichella, C., Thomas, S. J., & Bhaumik, D. (1998). Stress and distress among Gulf of Mexico shrimp fisherman (sic). *Human Organization*, 57(4), 404-413.
- Kilpatrick, S., Willis, K., Johns, S., & Peek, K. (2012). Supporting farmer and fisher health and wellbeing in 'difficult times': Communities of place and industry associations. *Rural Society*, 22(1), 31-44.
- Kilpatrick, S., Willis, K., Peek, K., & Johns, S. (2013a). Guidelines for Best Practice Health and Wellbeing Services and Resources for the Rural Sector (pp. 1-118). Barton, ACT: Rural Industries Research and Development Corporation.
- Kilpatrick, S., Willis, K., Peek, K., & Johns, S. (2013b). Staying Healthy: Behaviours and services used by farmers and fishers (pp. 1-118). Barton, ACT: Rural Industries Research and Development Corporation.
- King, T. J. (2005). Crisis of meanings - divergent experiences and perceptions of the marine environment in Victoria, Australia. *The Australian Journal of Anthropology*, 16(3), 350-365.
- King, T. J. (2007). *Between the devil and the deep blue sea - Negotiating ambiguous physical and social boundaries within the shark fishing industry of Bass Strait, Australia*. (PhD), University of Melbourne, Melbourne.
- King, T. J. (2011). The "Skipper Effect": Riddles of Luck and Rhetorics of Individualism. *Human Organization*, 70(4), 387-396.
- Klehe, U.-C., van Vianen, A. E. M., & Zikic, J. (2012). Coping with economic stress: Introduction to the special issue. *Journal of Organizational Behavior*, 33(6), 745-751. doi: 10.1002/job.1816
- Kline, A., Robbins, M. C., & Thomas, J. S. (1989). Smoking as an occupational adaptation among shrimpfishermen. *Human Organization*, 48(4), 351-353.
- Kucera, K. L., & Lipscomb, H. J. (2010). Assessment of physical risk factors for the shoulder using the Posture, Activity, Tools, and Handling (PATH) method in small-scale commercial crab pot fishing. *Journal of Agromedicine*, 15(4), 394-404.
- László, K. D., Pikhart, H., Kopp, M. S., Bobak, M., Pajak, A., Malyutina, S., . . . Marmot, M. (2010). Job insecurity and health: A study of 16 European countries. *Social Science & Medicine*, 70(6), 867-874. doi: <http://dx.doi.org/10.1016/j.socscimed.2009.11.022>
- Lawrie, T., Matheson, C., Ritchie, L., Murphy, E., & Bond, C. (2004). The health and lifestyle of Scottish fishermen: a need for health promotion. *Health Education Research*, 19 (4), 373-379.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park: Sage Publications.
- Matheson, C., Morrison, S., Murphy, E., Lawrie, T., Ritchie, L., & Bond, C. (2001). The health of fishermen in the catching sector of the fishing industry: a gap analysis. *Occupational Medicine*, 51(5), 305-311. doi: 10.1093/occmed/51.5.305
- Mayhew, C. (2003). Fatalities among fishing workers: Does size matter? *Journal of Occupational Health and Safety - Australia and New Zealand*, 19(3), 245-251.
- McDonald, M., DiBonaventura, M. d., & Ullman, S. (2011). Musculoskeletal pain in the workforce: the effects of back, arthritis, and fibromyalgia pain on quality of life and work productivity. *Journal of Occupational and Environmental Medicine*, 53(7), 765-770.
- Minnegal, M., & Dwyer, P. D. (2008a). Fire, Flood, Fish and the Uncertainty Paradox. *The Australian Journal of Anthropology*, 19(1), 77-81. doi: 10.1111/j.1835-9310.2008.tb00111.x
- Minnegal, M., & Dwyer, P. D. (2008b). Managing risk, resisting management: Stability and diversity in a southern Australian fishing fleet. *Human Organization*, 67(1), 97-108.
- Minnegal, M., & Dwyer, P. D. (2008c). Mixed messages: Buying back Australia's fishing industry. *Marine Policy*, 32(6), 1063-1071.

- Minnegal, M., King, T. J., Just, R., & Dwyer, P. D. (2003). Deep identity, shallow time: sustaining a future in Victorian fishing communities. *The Australian Journal of Anthropology*, 14(1), 53-71.
- Mirka, G. A., Shin, G., Kucera, K., & Loomis, D. (2005). Use of the CABS methodology to assess biomechanical stress in commercial crab fishermen. *Applied Ergonomics*, 36(1), 61-70.
- Mitchell, R., Driscoll, T., Healey, S., Hull, B., Mandryk, J., & Hendrie, L. (2001). Work-related fatal injuries in the fishing industry in Australia, 1989 to 1992. *Journal of Occupational Health and Safety—Australia New Zealand*, 17(4), 375–386.
- Murray, M., Fitzpatrick, D., & O'Connell, C. (1997). Fishermens blues: factors related to accidents and safety among Newfoundland fishermen. *Work & stress*, 11(3), 292-297.
- Palmer, C. T. (2003). A decade of uncertainty and tenacity in Northwest Newfoundland. In R. Byron (Ed.), *Retrenchment and regeneration in rural Newfoundland* (pp. 43-64). Toronto: University of Toronto Press.
- Peek, K., Johns, S., Kilpatrick, S., & Willis, K. (2011). *Staying healthy: how farmers and fishers maintain good health in difficult times*. Paper presented at the 11th National Rural Health Conference, Canberra.
- Percin, F., Akyol, O., Davas, A., & Saygi, H. (2011). Occupational health of Turkish Aegean small-scale fishermen. [Short Report]. *Occupational Medicine, early access* 1-4.
- Professional Fisherman. (2005). Depression and stress hitting dispossessed fishing families - Concerns of Crowdy Head fishermen and their families. *Professional Fisherman*, 27(8, June), 14.
- Robertson, S. (2007). *Understanding men's health: masculinity, identity and well-being*. Berkshire: McGraw-Hill International.
- Robroek, S., Van den Berg, T., Plat, J., & Burdorf, A. (2011). The role of obesity and lifestyle behaviours in a productive workforce. *Occupational and Environmental Medicine*, 68(2), 134-139.
- Ryan, G. W., & Bernard, H. R. (2000). Data management and analysis methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 769–802). Thousand Oaks: Sage Publications.
- Shaw, S., Johnson, H., & Dressler, W. (2011). Identifying, communicating and integrating social considerations into future management concerns in inshore commercial fisheries in Coastal Queensland. Report to the Fisheries Research and Development Corporation Project No. 2008/073. In Fisheries Research and Development Corporation & Queensland Seafood Industry Association (Eds.). Clayfield, Qld.
- Shoebridge, J. (Writer). (2004). Fishermen caught in political net, *Landline: Australia's National Rural Affairs Weekly*: Australian Broadcasting Corporation.
- Smith, S., Jacob, S., Jepson, M., & Israel, G. (2003). After the Florida net ban: the impacts on commercial fishing families. *Society & Natural Resources*, 16(1), 39-59.
- Stellman, S. D., Boffetta, P., & Garfinkel, L. (1988). Smoking habits of 800,000 American men and women in relation to their occupations. *American Journal of Industrial Medicine*, 13(1), 43-58. doi: 10.1002/ajim.4700130104
- WHO. (2003). Social Determinants of Health: The solid facts. In R. Wilkinson & M. Marmot (Eds.), (Second ed.). Copenhagen.

FRDC FINAL REPORT CHECKLIST

Project Title:	Staying Healthy: Industry organisations' influence on behaviours and services used by fishers		
Principal Investigators:	Tanya King, Sue Kilpatrick and Karen Willis		
Project Number:	2012/402		
Description:	<p>The project investigated the role of fishing industry organisations in facilitating the uptake of health and well-being services. The project involved focus groups and interviews in three fishing communities (two in Victoria and one in Western Australia), under the advice of a reference group. The results found that that fishers tend to recognise that physical health and injury, as well as mental health issues, are of concern. While some are pro-active, the majority of efforts are 'ad hoc' and initiated by individual, influential women in the community. Some service providers are aware of the particular needs of fishers but are not sufficiently resourced to act. Mental health issues are identified as the most pervasive threat to fishers and their families. This report presents the concerns of fishers as comprising 'traditional risks' (physical dangers, income variability, etc.), and 'modern uncertainties' (eg. concession insecurity), the latter of which is identified by fishers as the most pervasive. Fishers and their organisations tend to address poor mental health <i>symptoms</i> (depression, anxiety, suicide), via a focus on the perceived <i>causes</i> ('modern uncertainties'), despite their limited capacity to address the institutionalised nature of fishing concession insecurity. The report makes various recommendations to fisher organisations, health care providers as well as government.</p>		
Published Date:	NA	Year:	2014
ISBN:	978-1-74156-190-6	ISSN:	NA
Key Words:	<ul style="list-style-type: none"> • Fishers • Industry bodies • Soft entry points • Mental health • Conflict with recreational fishers • Fishing licence • Health and well-being • Health services • Stress • Physical health • Property rights • Quota 		

Please use this checklist to self-assess your report before submitting to FRDC. Checklist should accompany the report.

	Is it included (Y/N)	Comments
Foreword (optional)	Y	
Acknowledgments	Y	
Abbreviations	Y	
Executive Summary	Y	
– What the report is about	N	
– Background – why project was undertaken	Y	
– Aims/objectives – what you wanted to achieve at the beginning	Y	
– Methodology – outline how you did the project	Y	
– Results/key findings – this should outline what you found or key results	Y	
– Implications for relevant stakeholders	Y	
– Recommendations	Y	
Introduction	Y	
Objectives	Y	
Methodology	Y	
Results	Y	
Discussion	Y	
Conclusion	Y	
Implications	Y	
Recommendations	Y	
Further development	Y	
Extension and Adoption	N	
Project coverage	N	

Glossary	N	
Project materials developed	N	
Appendices	Y	