CERIPH

Curtin University

KNOW INJURY WORKFORCE REVIEW

A REPORT FOR INJURY MATTERS

COLLABORATION FOR EVIDENCE, RESEARCH AND IMPACT IN PUBLIC HEALTH

JUNE 2018

COLLABORATION FOR RESEARCH, EVIDENCE & IMPACT IN PUBLIC HEALTH

The Collaboration for Research, Evidence & Impact in Public Health (CERIPH) (formerly the Western Australian Centre for Health Promotion Research) is a multi-disciplinary research group within the School of Public Health at Curtin University, operating since 1986.

VISION

CERIPH seeks solutions that promote health, prevent disease and protect populations from harm. We build individual and organisational capacity through our partnerships, applied research, education and workforce training. Recognising the complexity of health and its determinants, our multidisciplinary collaboration provides leadership and evidence to support action across educational, organisational, socio-economic, environmental and political domains to improve population health in our region.

FUNCTION

The team has expertise in the development, implementation and evaluation of formative and longitudinal intervention research in key areas such as: early childhood health and nutrition; physical activity and nutrition; alcohol and other drug use; seniors' health; mental health; HIV and sexual health. CERIPH is a unique research group in that all core staff hold front-line research and teaching positions. The group aims to foster the practice of health promotion by encompassing the nexus between research and practice.

CERIPH has built and demonstrated high level expertise and research strength in:

- Building sustained partnerships and collaborations with vulnerable and most at risk communities and relevant community, government and private sector organisations
- Health promotion approaches using community and settings-based interventions, peer and social influence, social marketing, advocacy, community mobilisation and sector capacity building
- Promotion and dissemination of evidence-based practice and building practice-based evidence
- Provision of research training and capacity building techniques to undergraduate and postgraduate students, allied health promotion professionals and community workers.

The project steering group comprising Jonine Jancey, Gemma Crawford, Jonathan Hallett, Catrina Wold, Christine Smith and Emily Anderson was responsible for providing strategic direction, ongoing feedback and injury prevention expertise. Kristin Hunt was the project officer.

GLOSSARY OF TERMS

Engagement	The act of participating or becoming involved. It consists of three concepts: awareness, access and participation.
Capacity building	The ability or power to do or understand something. In this evaluation, capacity consists of four elements: workforce development, partnerships, organisational development and resource allocation.
Health professional	Person employed in a field of health in a clinical, allied health or population-based context
In-depth interview	A qualitative research technique that involves undertaking intensive individual interviews

ABBREVIATIONS

AHCWA	Aboriginal Health Council of Western Australia
AHPA	Australian Health Promotion Association
AIHW	Australia Institute of Health and Welfare
CEO	Chief Executive Officer
CERIPH	Collaboration for Evidence, Research & Impact in Public Health
DoH	Department of Health
Know Injury	Partnership and Sector Development Program
LGA	Local Government Authority
NGO	Non-Government Organisation
RNG	Regional Network Group
WA	Western Australia

EXECUTIVE SUMMARY

BACKGROUND

Injury is a leading cause of mortality in Australia and is frequently preventable. The most common causes of injury related deaths are falls, suicide, transport crashes and poisons, but also include drowning, burns and scalds, self-harm and violence. Since 1986, injury prevention and control has been classified as a National Health Priority. Building workforce capacity and infrastructure is critical to ensure a strong evidence base for effective interventions, a sufficiently sized and skilled workforce to achieve injury prevention and safety promotion targets and ultimately for positive health outcomes for the community.

This research sought to review the scope of the injury prevention and safety promotion workforce in WA to gain a greater understanding of sector characteristics, work and needs.

The objectives were to:

- Explore the characteristics of the injury prevention and safety promotion workforce in WA including: a) professional background, b) qualifications, c) key role activities, d) geographic location, e) target groups and f) context/setting.
- Establish the capacity of the injury prevention and safety promotion workforce to provide best-practice programs and activities (e.g. their understanding of key aspects of injury/safety promotion, experience, confidence, and capacity to deliver services).
- Establish the future capacity needs of the injury prevention and safety promotion workforce to support effective injury and safety initiatives (e.g. barriers to participation in training; support requirements (type, topic); preferred communication methods).

METHODS

A mixed methods study was undertaken that incorporated the collection of qualitative and quantitative data. These were composed of an online, cross-sectional survey (n=230) and in-depth interviews (n=12).

Participants in the survey research were required to:

- be based in Western Australia (WA) or have a program running within WA; and
- be involved with an injury prevention and safety promotion program, policy or legislation or have engaged with Injury Matters.

KEY FINDINGS

The survey snapshot of the injury prevention and safety promotion workforce found:

- Participants representing the injury prevention and safety promotion workforce were predominantly female (82%) aged 40 years or older (66.1%).
- The majority of participants had spent five to ten years working in the injury prevention and safety promotion sector (31.9%), were employed full time (55.6%) and the spent two or less days (51.9%) focusing specifically on injury prevention and safety promotion.
- Approximately 80% of participants held a tertiary qualification.
- The majority of participants worked in falls prevention (38.5%), alcohol and other drugs (38.0%), injury in general (31.8%) and community safety (30.7%).
- Participants worked at an individual (60.1%), group (58.4%) and community (52%) level.
- In terms of collaboration, participants were most likely to collaborate with Injury Matters, and the associated programs (30%) and Local Government (23%).

- Participants indicated that they were interested in further development in a variety of areas, most consistently injury specific topics (55.1%, n=48) and program planning (56.5%, n=48).
- Participants identified leading community injury issues in three key areas: 1) Injury topics: specific injury areas; 2) Risk factors contributing to injury; and 3) Larger systemic issues.
- Leading issues identified within survey participants' injury prevention and safety promotion roles were categorised into five areas: internal work issues; external systems; low injury topic knowledge; sector awareness of injury prevention; and community.

Interviewees further outlined the diversity and dimensions of the sector, suggesting:

- Variability in professional background and educational training.
- No one tertiary education qualification or route for people to work in the sector.
- The level of experience in injury prevention and safety promotion varied both in terms of length of time in the workforce and the length of time in a position that involved injury prevention and safety promotion. Some were able to capitalise on previous related positions to assist in the injury prevention work e.g. moving from community development to road trauma.
- Injury prevention and safety promotion as either core or non-core to organisations or roles.
- Key differences in undertaking work depending on whether an individual was based in metropolitan areas or a regional/remote location where priority issues could be different and different challenges were often noted.
- Whether injury prevention and safety promotion targeted an organisation's employee base or worked within the broader community which often resulted in two very different ways of working.
- Resource allocation appeared to be uneven across the sector which impacted on the program areas they could involve themselves in. Universally, resource allocation was a limiting factor especially for those wanting to deliver community-based programs.

CONCLUSIONS

This is the first research conducted in WA to better understand the composition of the injury prevention and safety promotion workforce, its activities and examine key barriers and facilitators for best practice injury prevention and safety promotion.

Findings suggest that the WA injury prevention and safety promotion workforce is highly heterogeneous and multidisciplinary with porous boundaries between this and other sectors. It contains a variety of organisations and occupations; conducts a wide variety of activity at different levels; and contains few practitioners who identify as specialists.

Results highlight a need to more regularly audit the sector to determine its breadth and composition. Viewing the injury prevention and safety promotion sector as a system composed of individuals and organisation requires an understanding of relationships and networks, and how these change and evolve according to context and time. Accordingly given the multiple socio-ecological determinants which influence injury and safety, recognising and exploring the range of core and non-core actors connected to this sector is critical.

There is an important role for a peak body in providing sector-wide strategic direction and in harnessing the disparate components of the sector to build momentum in raising the profile of the sector to support partnership and advocacy endeavours.

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LIST OF TABLES

BACKGROUND

Injury is a leading cause of mortality in Australia and is frequently preventable.[1] Since 1986, injury prevention and control has been classified as a National Health Priority and is a significant public health issue.[2] The most common causes of injury related deaths are falls, suicide, transport crashes and poisons, but also include drowning, burns and scalds, self-harm and violence.[3]

Building workforce capacity and infrastructure is critical to ensure a strong evidence base for effective interventions, a sufficiently sized and skilled workforce to achieve injury prevention and safety promotion targets and ultimately for positive health outcomes for the community.[4,5]

The National Injury Prevention and Safety Promotion Plan 2004-14[6] acknowledged the workforce's diversity, the need for training and the importance of strengthening its capabilities. However, this plan was written in 2005; currently Australia does not have a national plan despite injury being a major contributor to mortality and morbidity.

Along with an absence of national strategic direction, there lacks consistently used terminology and definitions around injury and what constitutes injury prevention. This contributes to the challenge of defining the injury prevention and safety promotion sector.

Findings from previous research have demonstrated the challenges of quantifying the public health, health promotion and prevention workforces,[7,8] particularly with no mandated requirement for registration of practitioners. As has been suggested by Begley and Pollard[5] in their review of the nutrition workforce in WA, *"It is not easy to quantify the size of the workforce required but there is no doubt that an appropriate workforce will have a profound impact on the ability to achieve effective outcomes".*

While practitioners concerned with specific injury prevention and safety promotion policy and program development, implementation and evaluation comprise a large portion of the workforce, there are many other professions involved that may not be recognised as part of the sector. These occupations include occupational therapists, nurses and health promotion practitioners. Such a broad workforce presents a range of inherent challenges to adequately monitor sector needs, trends and the measurement of individual and collective impact of programs on health outcomes.

A number of reviews of the public health and health promotion workforce have been completed including a national review of the injury prevention workforce in 2001.[9] However, none have been conducted to date that focus specifically on the injury prevention and safety promotion sector of Western Australia (WA).

The WA Health Promotion Strategic Framework 2017–2021 sets out WA Health's direction to reduce preventable chronic disease and injury. The plan highlights the need to develop the injury prevention and safer communities sector through strategic coordination, building partnerships and workforce development through "*that will support communication, ensure consistency of public health messaging, maximise the impact of limited resources, and minimise unnecessary duplication."*[10]

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[1] Australian Institute of Health and Welfare. Trends in hospitalised injury, Australia 1999–00 to 2014–15. Canberra: AIHW; 2018.
[2] Australian Institute if Health and Welfare. Commonwealth Department of Health and Family Services. First report on National Health Priority Areas 1996. Canberra; 1997.
[3] Australian Institute of Health and Welfare (AIHW). Australia's health 2018. Canberra: AIHW; 2018.
[4] Crawford G, Hallett J, Barnes A, Cavill J-L, Clarkson J, Shilton TR. Twenty years of capacity building and partnership: A case study of a health promotion scholarship program. Health Promotion Journal of Australia. 2018; 00, 1–4.
[5] Begley A, & Pollard CM. Workforce capacity to address obesity: a Western Australian cross-sectional study identifies the gap between health priority and human resources needed. BMC Public Health, 2018: 16(1), 881.
[6] National Public Health Partnership (NPNP). National Injury Prevention and Safety Promotion Plan 2004-2014. Canberra: Department of Health and Ageing; 2005.
[7] Gadiel D, Ridoutt L, Lin V, Shilton T, Wise M, Bagnulo J. Audit of the Preventive Health Workforce in Australia: Final Report of Project Findings. Sydney; 2012.
[8] University of Sydney. Mapping the preventive health workforce – overview report. Sydney: University of Sydney Business School, New South Wales; 2014.
[9] Human Capital Alliance. The Injury Prevention Workforce – a discussion paper. Sydney: Human Capital Alliance; 2002
[10] Chronic Disease Prevention Directorate. Western Australian Health Promotion Strategic Framework 2017–2021. Perth: Department of Health, Western Australia; 2017.

Clearly establishing the parameters of the WA injury prevention and safety promotion workforce will assist to achieve a more collaborative sector able to adequately address injury prevention and safety promotion. This research sought to review the scope of the injury prevention and safety promotion workforce in WA to gain a greater understanding of sector characteristics, work and needs.

The objectives were to:

- Explore the characteristics of the injury prevention and safety promotion workforce in WA including: a) professional background, b) qualifications, c) key role activities, d) geographic location, e) target groups and f) context/setting.

- Establish the capacity of the injury prevention and safety promotion workforce to provide best-practice programs and activities (e.g. their understanding of key aspects of injury/safety promotion, experience, confidence, and capacity to deliver services).

- Establish the future capacity needs of the injury prevention and safety promotion workforce to support effective injury and safety initiatives (e.g. barriers to participation in training; support requirements (type, topic); preferred communication methods).

METHODS

APPROACH

A mixed methods study was undertaken that incorporated the collection of qualitative and quantitative data. These were composed of an online, cross-sectional survey (n=230) and in-depth interviews (n=12).

CROSS-SECTIONAL SURVEY

PARTICIPANTS

Participants in the research were required to:

- be based in Western Australia (WA) or have a program running within WA; and
- be involved with an injury* prevention and safety promotion program, policy or legislation or have engaged with Injury Matters.

**Consistent with the definition of injury by the Australian Institute of Health and Welfare.*[3]

PROCEDURE

Potential participants were obtained from 1) an Injury Matters database and 2) a desktop review of agencies and individuals working in the WA injury prevention and safety promotion sector. An email containing a hyperlink to the online survey was initially sent to 785 individuals. After bouncebacks, 717 potential participants from a variety of management levels and injury areas were included in the final database. Participants were encouraged to forward the email containing the survey link to colleagues working in their injury prevention and safety promotion network to increase survey reach. A total of 230 individuals completed or partially completed the survey.

A staggered release of the survey began in mid-January 2018, with the main release occurring in February 2018. The survey closed mid-March 2018. Promotion of the survey was undertaken by Injury Matters. Organisations contacted by Injury Matters were encouraged to promote the survey to their injury prevention networks. Promotional methods included the use of Injury Matters' social media (Twitter and Facebook), external organisations' newsletters, organisational events such as the Know Injury Summit, and emails to contacts. The online survey used Qualtrics Survey Software© and took approximately 15 minutes to complete. Participants could voluntary select to go into a draw for three $100 gift vouchers.

SURVEY INSTRUMENT

To guide the development of the survey tool a comprehensive review of the literature was undertaken. Six academic databases were searched (Embase; Medline; Proquest Central; PubMed; PsycINFO; and Web of Science) for relevant literature along with a Google search of the grey literature. The search terms included: injury OR "injury prevention" OR "injury control" OR "community safety" OR "accident prevention" OR "safety management" AND workforce. A total of seven injury prevention workforce survey instruments were identified that explored competencies, classification, training needs, workforce issues and workforce activities. Two injury specific surveys were delivered in Australia [9,11] and one in Canada.[12] The Audit of the National Australian Preventive Health workforce;[7] the Northern Territory Aboriginal Health Worker Profession Review;[13] the New Zealand Public Health

[11] Department of Health WA. Injury prevention in Western Australia: A review of statewide activity. Perth: Chronic Disease Prevention Directorate, Department of Health; 2015.
[12] Feely S A. Competencies and training needs of injury prevention practitioners in Manitoba. Ann Arbor: Royal Roads University (Canada); 2000.
[13] Ridoutt L, Pilbeam V, Lee K. Final Report Aboriginal Health Worker Profession Review. Sydney; 2009.

Workforce Development Research survey,[14] and the Development of a Generic Working Definition of 'Supportive Care' from the United Kingdom[15] present alternate approaches. These were included due to a lack of specific injury prevention workforce surveys in the literature.

The survey tool was compiled and reviewed by staff from CERIPH and Injury Matters. The survey was then trialled at the Injury Matters Summit held in Perth in November 2017 with approximately 30 participants and modified as required. Domains of inquiry were: training and qualification; current role; organisation; job challenges and satisfaction; collaboration; current injury issues in the participant's role; community injury issues; and future needs.

ANALYSIS

Data was de-identified prior to analysis and no individuals are identified within the report. Data were analysed using SPSS Version 23 and frequencies reported. The open-ended responses within the survey were analysed and the overarching themes identified.

IN-DEPTH INTERVIEWS

PARTICIPANTS

Of the 230 participants in the cross-sectional survey, 59 provided their contact details to be followed up for a one-on-one interview. Of these, one repeat entry and four Injury Matters staff were removed leaving 54 contacts. These were then prioritised by Injury Matters and purposively selected to provide commentary in relation to diverse experiences in the injury prevention and safety promotion sector.

PROCEDURE

Survey participants were approached via email and phone to participate. A total of 12 respondents were purposively recruited. Interviews were conducted via telephone with the length of interviews ranging from 20-40 minutes. All respondents gave verbal consent following receipt of an email with an information sheet and a consent form and further checking by the interviewer. Interviews were audio recorded and transcribed. No incentives were provided.

INTERVIEW SCHEDULE

A uniform question guide was developed to ensure that the topic areas were consistently covered. Questions covered: the participant's professional role and injury prevention scope of work; barriers and enablers of delivering injury prevention and safety promotion activities; perceptions of injury prevention and safety promotion workforce profile; and engagement with Know Injury.

ANALYSIS

Analysis was performed on transcript data to uncover key themes aligned with areas of enquiry from the survey. Descriptive quotes were used to illustrate key findings (coded by participant identification number).

ETHICS

Ethics approval was obtained from the Curtin University Human Research Ethics Committee (RDHS-70-15) and Sir Charles Gairdner Hospital Human Research Ethics Committee (2016-062). Prior to the collection of any data, informed consent was obtained from the participants after informing them of the aim of the study; that participation in the study was entirely voluntary, that they had the right to withdraw at any stage; confidentiality would be respected; and as far as practicable, all quotes would be non-identifiable.

[14] New Zealand Ministry of Health. New Zealand Public Health Workforce Development Research: Survey of organisations and individuals. Phoenix Research Ltd; 2004.
[15] Cramp F, Bennett M I. Development of a generic working definition of 'supportive care'. BMJ Supportive and Palliative Care. 2013;3(1):53.

FINDINGS

WHAT ARE THE SECTOR'S CHARACTERISTICS?

SECTOR IDENTITY

Of the 230 survey participants, 82.6% (n=190) identified as being part of the injury prevention and safety promotion sector. Of the 17.4% (n=40) who responded to not being part of the sector, three subcategories were identified (see Table 1).

Table 1. Identify with the injury prevention and safety promotion sector

	n=230	%
Yes	190	82.6
No	40	17.4
Neither my role or organisation is part of the sector	*13*	*5.7*
But my organisation does work in the sector	*15*	*6.5*
But a specific area of injury is part of my role	*12*	*5.2*

DEMOGRAPHICS

Participants were predominantly female (82%; n=155), aged 40 years or older (66.1%, n=125), held a tertiary degree (82.1%, n=115), had worked in the sector for five to 10 years (31.9%, n=51) and more than half worked full time (55.6%, n=89). However, 41.9% (n=67) of participants stated they only spend a total of one day per week working in injury prevention or safety promotion, indicating that injury prevention and safety promotion is incorporated within a broader role (see Table 2).

Table 2. Demographics

Age	**n=189**	**%**
20 to 29 years	22	11.6
30 to 39 years	42	22.2
40 years and above	125	66.1
Gender	**n=189**	**%**
Male	34	18
Female	155	82
Highest formal qualification	**n=140**	**%**
High School	7	5
Vocational	6	4.3
Tertiary	115	82.1
Other	12	8.6
Time working in area	**n=160**	**%**
Less than 1 year	13	8.1
1-4 years	45	28.1
5-10 years	51	31.9
11-15 years	16	10
15+ years	35	21.9
Employed	**n=160**	**%**
Full time	89	55.6
Part time	42	26.3
Casual	10	6.3
Voluntary	5	3.1

Other	14	8.7
% of time spent on injury prevention or safety promotion	**n=160**	**%**
1 day (0-20%)	67	41.9
2 days (21-40%)	16	10
3 days (41-60%)	24	15
4 days (61-80%)	14	8.75
5 days (81-100%)	40	25

Participants were asked to name their working role. Participant responses were broken in to two categories: working role; and discipline/profession. This was done as participants did not always state their specific role but rather entered the area in which they worked.

Of the 178 responses, 'officer' (project officer, safety officer, health officer and development officer) had the highest representation (n=38, 21.3%), followed by manager (n=25, 14%), coordinator (n=25, 14%), and Chair/CEO (n=8, 4.4%) (see Table 3). The profession or discipline most represented was public health (n=41, 23%) (health promotion; prevention; environmental health; and community development). Allied health professionals (n=24, 13.5%) (physiotherapists, counsellors, social workers and psychologists); clinical services (n=14, 7.9%) (nursing and other medical professionals); occupational health and safety (n=14, 7.9%) and home and community services (n=11, 6.2%) were also represented. 'Other' (n=26, 16.4%) included administration, education, research and sport and recreation (see Table 3).

Table 3. Job Roles

Job Level	**n=178**	**%**
Officer	38	21.3
Manager	25	14
Coordinator	25	14
Chair / CEO	8	4.4
Consultant	4	2.2
Senior Officer	4	2.2
Discipline/Profession	**n=178**	**%**
Public Health	41	23
Other	26	14.6
Allied Health	24	13.5
Clinical services	19	10.7
Occupational health and safety	14	7.9
Home and community services	11	6.2

Interview participants (interviewees) also demonstrated the diversity of the workforce and included representation from the following: state government (n=4); local government (n=6); non-government organisation (n=1); and corporate (n=1). Interviewees were drawn from both metropolitan (n=6) and regional (n=6) locations. Professional roles included road safety advisors (n=2), employee health and wellbeing (n=1), health promotion and prevention (n=2), community development (n=2), active transport (n=1), occupational health and safety (OHS) (n=2), and disability support and prevention (n=2).

Consistent with survey findings, for some interviewees, injury prevention and safety promotion was their core responsibility, and they reported qualifications that aligned with injury prevention. For others it was part of a broader job remit with minor responsibility for injury prevention:

> *Well I'm one of the OSH representatives in our unit. And equally I have done studies in OSH and I have worked as an occupational health nurse at different times as well. So ... Yeah, so my knowledge base is quite broad. And over a very long time*. (ID03, state government)

However, further questioning revealed this interviewee held a clinical position and injury prevention comprised approximately 5 to 10% of their role, mainly focused on OHS.

A good example of someone with a diverse job where injury prevention was estimated to only take up about 10% of their focus is this local government interviewee who assists others in the delivery of injury prevention messages:

> *Ok, my actual injury prevention doesn't consist of much at all. It's something that we can see, that, you know, the things, I don't deliver programs around injury prevention. If somebody else delivers a program I might support them through providing them a venue, through providing them administration support, networking, those sorts of things. Yeah. That's probably about it.* (ID09, local government)

This can be contrasted with another interviewee working in road safety where 100% of their job was focussed on injury prevention, "*because the whole idea of road safety is preventing injury"* (ID04, local government).

ORGANISATIONAL FOCUS

Of the nineteen injury areas outlined in the survey, falls prevention (49.7%, n=99), alcohol and other drugs (46.2%, n=92), general injury (42.2%, n=84) and community safety (41.7%, n=83) were the most common areas of focus for organisations. Those who responded 'other' (n=14.7%) stated that their organisation focused on injury areas such as public health (n=1), crime prevention (n=1), rehabilitation (n=1), and mental health (n=1) (see Table 4).

Table 4. Organisational focus

Organisational area of focus	n=199	%
Falls prevention	99	49.7
Alcohol and other drugs	92	46.2
Injury in general	84	42.2
Community safety	83	41.7
Occupational health & safety	68	34.2
On-road vehicle (Including motor vehicle, bicycle and pedestrian)	63	31.7
Suicide and self-harm	58	29.1
Trauma services	52	26.1
Child safety	51	25.6
Counselling services	45	22.6
Sport and recreation injuries	43	21.6
Domestic violence (including child and older people)	41	20.6
Burns and scalds	39	19.6
Drowning prevention	37	18.6
Interpersonal violence	35	17.6
Off-road vehicles (All terrain and quad bikes)	29	14.6
Foetal Alcohol Spectrum Disorder	24	12.1
Unintentional poisoning	22	11.1
Farm safety	17	8.5
Other	14	7.0

ORGANISATION TYPE AND LOCATION

The majority of injury organisations were non-government organisations (NGOs) (25.3%, n=40), state government (19.6%, n=31), hospital/medical centres (n=30, 19%) or local government (17.7%, n=28). Funding for these organisations predominantly came from state government (72%, n=113) (see Table 5).

Table 5. Organisation type & funding

Organisation type	**n=158**	**%**
Non-government organisation or community group (NGO)	40	25.3
State government	31	19.6
Hospital or medical centre	30	19
Local government	28	17.7
Tertiary or research institution or technical education provider	12	7.6
Private organisation	9	5.7
Emergency services	1	0.6
Other	7	4.4
Funding	**n=157**	**%**
State government	113	72
Funding body (grants)	37	23.6
Federal government	30	19.1
Fee for service	29	18.5
Donations	21	13.4
Memberships	10	6.4
Sponsoring agency/department	8	5.1
Other	19	12.1

ORGANISATIONAL DIVERSITY

Through the interviews there emerged four parameters that characterised sector diversity (see Figure 1):

- Geographic location – whether metropolitan based or regionally based. Several organisations worked across the state, or through regional centres such as Bunbury and Geraldton, which usually included responsibility for working in more remote areas. For example, a Geraldton based worker was responsible for road safety in 16 local government areas covering the whole Midwest.
- Core/non-core business - injury prevention was either a core business i.e. the principal business of the organisation or was more peripheral or incidental to other project areas.
- Facilitating or delivering – a distinction was made between organisations that primarily facilitated other organisations to deliver injury prevention programs (e.g. WALGA) versus those that delivered services themselves (e.g. the local road safety committee).
- Internal or external delivery – some interviewees worked primarily internally supporting their own organisations. This was particularly so in OHS as compared with those who delivered programs to the community e.g. community development officers.

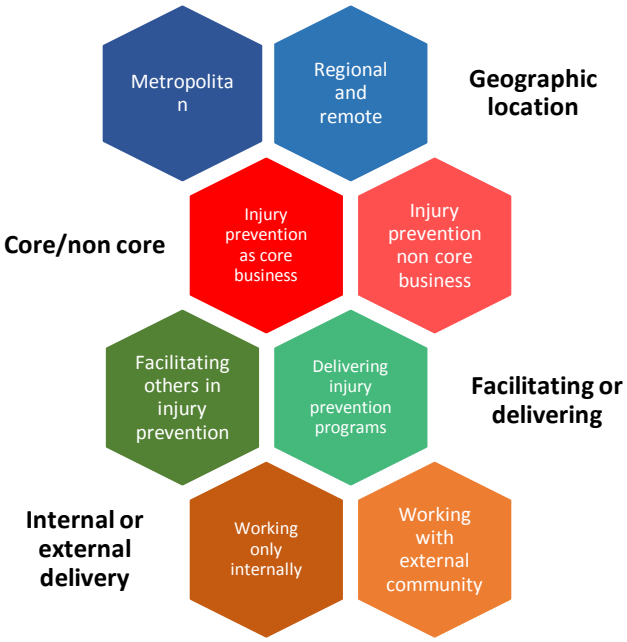

Figure 1. Injury Prevention Organisational Parameters

WHAT WORK DOES THE SECTOR DO?

The work undertaken by all participants reflects the diversity of the sector. This diversity is driven by the nature of the organisation as indicated by the four parameters and also affected by both internal forces (such as strategic plans) and external factors (such as community pressure, epidemiology and funding).

INJURY FOCUS

Survey participants indicated they predominantly worked in the areas of falls prevention (38.5%, n=69) and alcohol and other drugs (38%, n=68). This was closely followed by general injury areas (31.8%, n=57), community safety (30.7%, n=55), and occupational health and safety (25.7%, n=46) (see Table 6).

Table 6. Current injury focus

Injury area	n=178	%
Falls prevention	69	38.5
Alcohol and other drugs	68	38
Injury in general	57	31.8
Community safety	55	30.7
Occupational health & safety	46	25.7
Suicide and self-harm	42	23.5
On-road vehicle (Including motor vehicle, bicycle & pedestrian)	41	22.9
Child safety	34	19
Trauma services	32	17.9
Sport and recreation injuries	26	14.5
Domestic violence (including child & older people)	26	14.5
Counselling services	25	14
Drowning prevention	24	13.5
Interpersonal violence	23	13
Foetal Alcohol Spectrum Disorder	18	10
Off-road vehicle (All terrain & quad bikes)	17	9.5
Burns and scalds	17	9.5
Unintentional poisoning	9	5
Farm safety	7	3.9
Other	22	12.3

Interviewees suggested that there are not always discrete areas of focus as there are often co-contributing factors that can be grouped together. Often an injury prevention worker needs to be across several fields, as illustrated in these quotes:

> *Alcohol* [is an injury focus], *in particular and other drugs; relate to a contributing factor to a lot of injuries. As is poor mental health.* (ID01, state government)

> *So, in injury prevention, road trauma is one of the areas that we, you know, we focus on and then there is obviously falls prevention, there is alcohol harm minimisation as well, and we also have a role in trachoma prevention, you know, disease prevention role as well…. But it's not purely injury prevention that.* (ID08, state government)

TARGET GROUPS

Of the nine target groups identified, general community (54.3%, n=94), adults aged 25 to 64 years (53.2%, n=92), adults aged 65+ (49.7%, n=86) and adolescents aged 15 to 24 years (48%, n=83) were evenly represented. Other target groups included Aboriginal and Torres Strait Islander people (42.2%, n=73), rural and remote populations (39.9%, n=69), workforce (38.7%, n=67) and culturally and linguistically diverse (CALD) groups (32.9%, n=53). Within these populations groups participants indicated working at an individual (60.1%, n=104), group (58.4%, n=101) and community (52%, n=90) level (see Table 7).

Table 7. Target group focus

Target group	**n=173**	**%**
General community	94	54.3
Adults 25-64	92	53.2
Older adults 65+	86	49.7
Adolescents and young adults 15-24	83	48
Aboriginal and Torres Strait Islander people	73	42.2
Rural and remote populations	69	39.9
Workforce	67	38.7
Culturally and linguistically diverse	57	32.9
Children 0-14	53	30.6
Other	6	3.5
Level of engagement with target population	**n=173**	**%**
Individual – one-on-one	104	60.1
Group	101	58.4
Community	90	52.0
Population or State	57	32.9
Other	13	7.5
Location work undertaken	**n=157**	**%**
Metropolitan Areas		
North Metropolitan area	77	49.0
South Metropolitan area	73	46.5
East Metropolitan area	60	38.2
Regional Areas		
South West	63	40.1
Great Southern	51	32.5
Wheatbelt	50	31.8
Midwest	49	31.2
Goldfields	46	29.3
Pilbara	41	26.1
Kimberley	37	23.6

While some interviewees indicated that they worked with a very broad target group, often the whole community, several positions were distinctly focussed on a particular target group. This was usually a function of either their position or the core business of the organisation and included the following:

- Seniors - within a local government
- Road users – core business of WALGA road safety advisers
- Employees – of an organisation when OHS or wellness is the focus
- Youth – mental health and road trauma

For many interviewees with a broad portfolio the target audience changed depending on the project they were working on or had funding for. For example, a local government area had a youth focused festival which incorporated several injury prevention messages amongst other messaging.

ROLE ACTIVITIES

The majority of survey participants indicated that education and training (73.8%, n=118,) was a function of their role. More than half undertook community engagement (57.5%, n=92) and program planning and implementation (55%, n= 88) (see Table 8).

Table 8. Activities within current role

Activities	n=160	%
Education and training	118	73.8
Community engagement	92	57.5
Program planning and implementation	88	55.0
Data collection and analysis	82	51.3
Evaluation of programs or interventions	76	47.5
Communications or media	70	43.8
Health and wellbeing	68	42.5
Advocacy	63	39.4
Research	51	31.9
Secure and manage funds	36	22.5
Public policy	35	21.9
Treatment	28	17.5
Counselling	27	13.9
Other	11	6.9

For many interviewees, day-to-day activities or tasks were highly variable, "*the typical week is not typical. I don't have a typical week"* (ID04, local government). This illustrates the diversity of activities many in the sector undertake both reactively and proactively:

> *It's really difficult to describe* [a typical week] *because I could have a whole week in the office and I'm just reporting on activities, interact with databases for reporting, you know, or I could be on the road every single day of the week at different meetings.* (ID05, local government)

The following quote is illustrative of someone working in the sector in a facilitator role where there is a need for collaboration with community and other organisations ultimately responsible for the delivery of injury prevention programs:

> *That is on a community level, and I work with stakeholders within the community. Not community members per se, but people who have prevention as part of their role. And I'm responsible for facilitating the development of plans. And then, within each region, there's usually a prevention worker, and my role is to support the prevention worker, or the AOD prevention person, or suicide prevention person to implement those plans to ensure that the activities that they said they're going to do get done. And I guess in terms of injury prevention, you know, at least, I mean, the plans are designed to reduce harm, so whether that's injury or other types of harm. That's what I do, so that's my core role, and so, and then, you know, the other part that comes with that is just kind of like*

> *talking to people, and going to meetings, and reading data so that these can assist with the evidence to support, good evidence to, for the activities that you're implementing within the region. It's all evidence based.* (ID01, state government)

The OHS representatives interviewed had process and policy focus. Their tasks were focused internally covering activities such as regular OHS meetings, discussing incident reports, identification and addressing potential hazards. Some of this work was very driven by policy and OHS requirements e.g. risk management systems, mandatory training, incident investigating and reporting and managing return to work programs. Injury prevention may be incidental to the focus of this role, "*So, with regard to the injury, it's always just looking for potential risks*" (ID03, state government). This person was also involved in facilitating training within the workplace e.g. manual handling however they held a clinical position. OHS may also be handled within the human resources area and activities may be broader ranging as illustrated by this interviewee:

> *OSH sits in my area so the committee meets on a monthly basis and we have meetings to look at any incidents, any hazards, any potential areas for improvement in the health and safety of our employees. From a strategic point, we have policies that look at protecting our employees in terms of health and safety and also providing wellbeing for them. And also... all the workers' compensation goes through my department. So certainly, I am aware of anything of a safety issue there or a health issue.* (ID06, local government)

The following Regional Road Safety Advisor facilitated the delivery of community-based programs by other organisations and community groups:

> *So, I try and make sure that they understand that I'm here to support them in their roles of what they do. And also, advise for best practice so that they stay on the right track and not try and put forward projects that may actually harm. So, I can get that information if I haven't got it. Or I give them the information that I have got regarding the different things there could be … regarding speed limits, could be regarding funding grants, youth driver education, all sorts of things.* (ID04, local government)

This same person was sometimes involved in helping at community events such as:

> *And today, we've got an event running. And again, that's a holistic approach where it's with the local drug action group. And so, it targets drugs and alcohol issues around that. So, drunk driving is an issue. And so, is drugged driving. …. Where people were, actually get to speak to our staff. And they also make up their own little slogans on a board and do funny photos. And quite often, the drug and alcohol to do with driving comes up in those issues. And then, people start talking.* (ID04, local government)

Setting up and organising community events and displays was noted as an activity by several interviewees, for example:

> *So, we organise the expo, so we have a table on display, but we actually brought people in that field to display the information, and then for example I just went and did a presentation for a seniors' groups a couple of days ago, and I talked about mall walking and falls prevention and how important it was, and you know, activities that we offer within the city and resistance training and things like that. And then, I guess social isolation we talk about a lot*. (ID07, local government)

ROLE CONFIDENCE

The majority of survey participants rated themselves between 'somewhat confident' and 'very confident' at completing the following tasks. Participants reported being 'very confident' (61.2%, n=63) and 'somewhat confident' (34.0% n=35) at undertaking program planning. Areas where participants acknowledged that they were 'not confident' were grant writing (34.7%, n=28) and survey design (20.3%, n=19) (see Table 9).

Table 9. Confidence in performing tasks

Confidence undertaking task	Very confident		Somewhat confident		Not confident	
	n	%	n	%	n	%
Program planning (n=103)	63	61.2%	35	34.0%	5	4.8%
Injury specific topic (n=100)	56	56.0%	38	38.0%	6	6.0%
Evaluation (n=120)	53	44.2%	53	44.2%	14	11.6%
Advocacy (n=115)	47	41.0%	59	51.0%	9	8.0%
Conducting/ accessing/ understanding research (n=114)	42	36.8%	57	50.0%	15	13.2%
Communications and media (n=93)	35	37.6%	43	46.2%	15	16.2%
Grant writing (n=81)	32	39.5%	29	35.8%	28	34.7%
Survey design (n=94)	23	24.4%	52	55.3%	19	20.3%

WHO DOES THE SECTOR WORK WITH?

When undertaking injury prevention and safety promotion work survey participants stated that the organisations they collaborated with were predominantly either Injury Matters (n=28) (citing Injury Control Council of WA (ICCWA), Injury Matters and specific programs such as Stay on Your Feet (SOYF) and Know Injury); or Local Government (n=23) (see Table 10).

Table 10. Collaboration injury prevention and safety promotion work

Organisation	n=132
Injury Matters	13
Stay on Your Feet	9
ICCWA	3
Know Injury	3
Local Government	23
KidSafe	12
Royal Life Saving Society WA (RLSSWA)	12
Medical and Allied Health: Emergency Departments, GPs, Psychiatric hospitals, Psychologists, Physiotherapists	11
Department of Health	11
WorkSafe	11
WA Police	11
School Drug Education and Road Aware (SDERA)	10
Occupational Health & Safety departments	9

Survey participants reported that when considering the injury prevention and safety promotion sector in WA, Injury Matters (citing ICCWA, Know Injury, Stay On Your Feet) (63%, n=87) came to mind as the leading organisation. Other specific organisations reported were KidSafe (27%, n=37), WorkSafe (23%, n=32), Royal Life Saving Society of WA (20%, n=28) and RoadWise (15%, n=21) (see Table 11).

Table 11. Recall of injury organisation in Western Australia

Organisation	n=138	%
Injury Matters and programs	87	63.0
Injury Matters	47	
ICCWA	13	
Know Injury	11	
Stay on Your Feet	16	
KidSafe	37	27.0
WorkSafe	32	23.0
Local Government Authorities & programs	39	28.0
Roadwise	21	
WALGA	10	
Local Government including Community Safety Network	8	

Royal Life Saving Society WA (RLSSWA)	28	20.0
Road Safety Commission	18	13.0
Department of Health	16	12.0
Surf Life Saving Society WA (SLSSWA)	14	10.0
WA Police	12	9.0
School Drug Education and Road Aware (SDERA)	12	9.0
Mental Health Commission	12	9.0
Occupation Health and Safety departments	8	6.0
St John Ambulance / Emergency services	7	5.0
Royal Automobile Club (RAC)	6	4.0
Paraplegic Benefit Fund	6	4.0
WA Country Health Services (WACHS)	5	3.6

WHAT ARE THE SECTOR'S LEADING ISSUES?

ISSUES FOR COMMUNITY

Identified leading community injury issues (n=131) were categorised into three key areas: 1) Injury topics: specific injury areas; 2) Risk factors contributing to injury; and 3) Larger systemic issues.

The majority of participants stated they were concerned with specific injury areas: alcohol and other drugs (n=90), road trauma (including on and off road, cycling and pedestrian safety (n=33), falls prevention (n=26), suicide and non-suicide self-injury (n=19), violence (n=20), drowning (n=7) and mental health (n=6).

Risk factors for injury (n=39) were identified by participants as low awareness and understanding of the risk of injury, peer pressure and specific risks such as: driving fatigue; overmedicated elderly persons; and driving and mobile phone use.

The poor understanding of injury prevention by the community was also raised by interviewees:

> *It's just a huge area* [injury prevention] *and there are so many different risk factors in injury prevention that you can work on. And I think the understanding of injury prevention is not that much around the general public …* (ID08, state government)

> *Sometimes safety is saying what you do after an injury, the emergency room, and not the injury prevention.* (ID11, non-government organisation)

Larger systemic issues (n=15) identified by survey participants centred on long waiting lists for community based services, low community collaboration and engagement, staff issues, budget cuts and affordable care (see Table 12).

Table 12. Identified leading community injury prevention issues

Injury issues	**n=131**
Specific injury topics	90
Alcohol and other drugs	42
Road trauma	33
Falls prevention	26
Suicide and NSSI	19
Violence – including domestic and interpersonal violence	20
Drowning	7
Mental health	6
Specific risk factors for injury	39
Larger systemic issues	15

No universal priorities emerged from the interviews which may reflect the diverse nature of the sector. However, to improve the functioning of the sector a range of factors were identified by interviewees that contributed to the successful operations and delivery of injury prevention and safety promotion programs.

For example, the role of collaboration, community involvement and interest:

> *I feel like our communities are really quite engaged so that if you started, you know, having people that want to be there and come to, you know, forums and events, things like that around the topic, helps. And then relationships and partnerships with the right organisations … working in collaboration definitely make that successful*. (ID07, local government)

Having issues that the community identify with also support successful interventions:

> *… because they are community issues in the region, so alcohol is a huge issue in the Midwest region, that's why we are tackling that issue and have that prevention plan. And also, road trauma is another one, it's quite a big one in the Midwest region. So, I guess community issues, you know.* (ID08, state government)

Professional networking through Know Injury and other professional groups e.g. National Road Safety Partnership Program:

> *I can't work on my own. Everything I do depends on so many different groups of other people. And they may not just be Road Safety committees …. A lot of these might be sports groups. We've even had a craft group working on a project. It could be the staff from local government. Could be the CEOs themselves, you know, being involved in something. It varies a lot. And we've also got an industry alliance. And so, road safety is an aspect of everything that is done.* (ID04, local government)

Having 'experts' to assist with the delivery of professional development and other community events:

> *Probably having people that can come and do workshops, or programs, or we have Kidsafe came down and they held a workshop. We had Royal Life Saving come and talk to the early year grades, so having those people that can help with little bits of professional development and help with awareness raising, people that can do little workshops and such for the community*. (ID09, local government)

The importance of management support as a positive factor is illustrated here:

> *It's always that fight to get things changed, improved, or removed. Yeah. So, I mean, management support can work both ways, you know. If there's a good strategy or initiative, management support is great for that. But if you've got an initiative or strategy management doesn't support it, then it's very hard to work.* (ID10, corporate)

Electronic access was mentioned by one regional interviewee as being an important aid for their injury prevention work. This involved being able to access resources and support and being able to connect with the communities and committees they are supporting. This is especially so when the size of the state and the large geographic regions to be covered (i.e. a 600km one-way trip to support a community) are considered. Support for professional development is illustrated by this respondent:

> *Basically, access to things like training, around programs, setting up programs, evaluating things… it's a very large area. We don't want to get stuck. And I think being able to connect that with other practitioners, part of the regional team, connecting with other areas or contacting them* [contributes to success]. (ID05, local government)

Other success factors mentioned included:

- Professional development and access to good resources
- Good policy and legislative requirements e.g. in road safety and OHS
- WHO 'safer communities' accreditation – achieved by one local government greatly assisted other injury prevention initiatives

- Adequate resourcing (including funding) and time to undertake prevention projects
- Availability of good research and an evidence base to support projects

ISSUES FOR WORK ROLES

Leading issues identified within survey participants' injury prevention and safety promotion roles were categorised into five areas:

1) internal work issues (e.g. personnel and lack of resources);
2) community (e.g. community lack of knowledge and awareness; community attitudes to injury risk; engaging the community)
3) external systems (e.g. funding and policy issues);
4) sector awareness of injury prevention (e.g. misunderstanding of what injury prevention is, needing to raise sector profile); and
5) low injury topic knowledge (see Table 13).

Table 13. Injury prevention & safety promotion challenges

Challenges identified	n=139
Internal work issues	69
Community	53
External systems	38
Sector awareness	16
Low injury topic knowledge	15

The majority of participants (n=139) highlighted internal work issues (n=69) as a challenge within their role. These included issues around lack of resourcing and staffing. The community issues (n=53) nominated by participants were around specific injury issues such: as alcohol and other drugs and road safety. Also highlighted within community issues were a lack of community engagement with injury prevention and attitudes towards injury prevention. External issues (n=38) including funding and policy were also highlighted as a challenge to people undertaking their work.

A range of issues were noted by interviewees as being challenges to working in the injury prevention and safety promotion sector. These issues overlapped in part with the response categories from survey participants (above) and are explored below with illustrative quotes. They have been broadly themed in the following categories: funding and resourcing, community support, bureaucracy, 'fun police', and sector identity and visibility.

<u>Funding and resourcing</u>

Funding and resourcing challenges were noted by the majority of interviewees.

The majority of interviewees discussed the constraints of being able to access adequate funding to run programs themselves or help community and other organisations access funding to deliver their own programs.

> … *budget, you know, because I'd have dollars and we've identified a really good location*, [for the outdoor exercise equipment] *so just getting funding for that, I think, it'll definitely be a barrier even though we can show health benefits and community interaction I think as well as socialisation for a lot of people.* (ID07, local government)

Sometimes this resulted in program decisions pragmatically 'following where money was' (e.g. road trauma) even if the evidence did not indicate this should be a priority.

> *The funding is an issue, sometimes, because certain things that aren't necessary may not always get funded. And other things, when they seem to be promoting, you know, good PR, they tend to get funded.* (ID04, local government)

> *So that kind of local government tends to go where the money is. It's just many factors and we have not really had like a budget or something.* (ID05, local government)

For others it meant relying on the good will of people to work for free on top of their usual jobs e.g. pharmacists in a safe medicine program. This meant for some convincing people that injury prevention was part of their job.

Not having easy accessibility or being regionally based were challenges for some. For example, while this interviewee recognised that Know Injury did some good Perth-based things like the Injury Summit they noted that:

> *We have low staff* [numbers] *and we are all quite busy. Something has to be really relevant for us to be out, taking the time out to go out to Perth or something, I mean we're looking at a four-hour drive or three to four-hour drive to get there, so usually you have to stay overnight. So, it has to be really relevant and we're certainly not going to go out for an hour to training or an hour to conference, summit, network, whatever it is, really, it's not good use of our time.* (ID09, local government)

Additionally, staffing issues including turnover, working with people who did not have an injury prevention background, injury prevention only being a small part of roles or inexperience were raised as issues.

Community support

Within a community there may be a tension between what the evidence indicates as being priority injury prevention areas versus what community members perceived to be the priority areas. For example:

> *I remember when they had a fatality of a young person and all of a sudden, they want to pay all of the attention to that. It ends up going sort of more toward* [re]*action than injury prevention.* (ID05, local government)

Achieving community buy in and support for injury prevention programs especially those relying on volunteer input was also noted as challenging:

> *So, the, you know, there used to be volunteers, a culture of volunteering and community spirit. Now, there seems to be a lot more of a culture of it's not, you know, it's not my job; I don't get paid for that. These people get paid for it. It's their job to do it. So, trying to get people to understand that road safety is everybody's issue and everybody's responsibility.* (ID04, local government)

For those in OHS, complacency was listed as one challenge. Some employees were seen as complacent about their individual role in workplace injury prevention as illustrated here:

> *… sometimes just not thinking things through, and not assessing the risk or what might happen because the task is repetitious and 99% of the time, everything's okay, but that 1% of the time, they forgot to do something*. (ID06, local government)

The returns from injury prevention interventions are usually long term and as noted by the following interviewee could be hard to measure which also made it harder to talk about success and impact of interventions:

> *It's hard to measure prevention. It takes a long time before you see change. So, if people don't attribute some of the strategies as prevention strategies, you know, like reducing smoking or things like that, they don't see it as needed, and it's much easier to measure treatment.* (ID01, state government)

Bureaucracy

Bureaucracy as it related to process, rules and regulation was seen as a barrier for implementation and progress by some.

This was noted by one interviewee facilitating community based regional road safety programs:

> *There's bureaucracy, and then there are the people in committees that really don't understand bureaucracy. And they want things done, yesterday. And they lose interest if they can't get things done. So, trying to keep that interest and not putting them through that as much possible. So, for example, if they're applying for a funding grant, people look at them and go, it's just too hard.* (ID04, local government)

An example of how bureaucracy could also be a challenge in a state government department was highlighted by another interviewee:

> *There's a lot of rules and regulations to help injury prevention, but I think sometimes they can cause it as well. People don't want to go through all the paper work or the funding or whatever to get to do stuff, so they bypass that and then, you know, accidents can happen.* (ID10, corporate)

<u>'Fun police'</u>

Community perceptions of interference or overregulation were noted as challenges for implementation by some, with the perception of community attitudes of 'it won't happen to me' or community acceptability of behaviours viewed as ingrained:

> *Prevention can get a bit of bad rap, and you're perceived as the fun police. And it's, you know, it's not as fun as promoting getting drunk, and pissed, and going out with your friends, or, I don't know, riding bikes without your helmets, or that, so it is constricting.* (ID01, state government)

> *… if it starts to interfere with their personal life, like people like to do with alcohol, for example, because it's legal, you know. It's very popular. It's very hard to tell people, you know, to tone it down because their culture may be different. So, it's sort of like a clash between what is shown to be, what evidence shows. Because, quite often, people will switch off because evidence has changed so much throughout times. People don't know what to believe anymore either. And so, that means when the experts say something they don't always treat it as truth.* (ID04, local government)

A Community Development officer highlighted this in relation to rural communities where farming is a big part of life:

> *Yes, we're rural. People think that they, rules don't apply to them. We can ride on our farm bikes, on our quad bikes and stick our kids on the front and so, there's still some of that, 'things don't apply to us because we live in the country' sort of mentality.* (ID09, local government)

<u>Sector identity and visibility</u>

Lack of understanding related to 'injury' was highlighted as a challenge to the extent that this interviewee thought Know Injury should lose the word 'injury':

> *Anything that would take the word Injury out. So, injury, if you say injury to anybody you think of a broken bone, or a cut knee, or you know going to, having to go to the hospital to get fixed up, you don't think of suicide. You don't think of, you know, harm to an unborn child, you don't think to whether you think with injury doesn't, really leave it to your vision of what they are*. (ID09, local government)

Others noted the lack of profile for injury prevention and its perceived relevance posed challenges for engagement:

> *… to realise what their role is, the part that they play in reducing harm. Sometimes they don't really see their role. Their role could be in prevention because perhaps they're a clinician, or a policeman, or the Shire, for instance. They don't actually make the link, so you've got to help make those links for them… So you just have to find out what their area and how that was specifically part of the prevention models that you use that they could fit into. So, you need to make it relevant to them. And if you can make it relevant, then they'll have an 'a-ha', and then they'll do what's required to help you implement the plan.* (ID01, state government)

A lack of sector identity and understanding was also suggested:

> *… it's not a sector that anyone really works in … but if you look at like we work very much with if you're looking at the community, the family centres, that they are say, the youth groups, it's, it doesn't target or fit into a sector, it just sort of floats around out there on the periphery of everything*. (ID09, local government)

Some noted lack of management support or understanding for injury prevention and safety promotion work or the challenge of working with partner organisations that may have very different core business and priorities. It was also suggested that the broader health promotion and public health arena is crowded and competitive, making messaging in relation to injury prevention potentially confusing:

> *I think also there are so many programs out there, so you know, you've got Act Commit Belong, you know, Know Injury, oh gosh, I could reel off a million of them, there is so much out there, it's not well, it's not very well known about, it's not sexy, it's not quite colourful in your face, and it does seem to be, it's here, I don't think they're very well promoted*. (ID09, local government)

WHAT ARE THE SECTOR'S NEEDS FOR THE FUTURE?

Survey participants indicated that they were interested in further development in a variety of areas. The majority reported they would be 'interested in' or 'somewhat interested in' all areas presented. Injury specific topics (55.1%, n=48) and program planning (56.5%, n=48) had the highest number of participants who were 'very interested', while around a third of participants indicated grant writing not to be of interest (30.4%, n=24) (see Table 14).

Table 14. Interest in up-skilling

Areas for further development	Very Interested		Somewhat interested		Not Interested	
	n	%	n	%	n	%
Program planning (n=85)	48	56.5%	30	35.3%	7	8.%
Injury specific topic (n=87)	48	55.1%	35	40.2%	4	4.7%
Advocacy (n=83)	44	53.1%	28	33.7%	11	13.2%
Evaluation (n=84)	44	52.4%	32	38.1%	8	9.5%
Conducting/ accessing/ understanding research (n=82)	38	46.3%	34	41.5%	10	12.2%
Grant writing (n=79)	33	41.8%	22	27.8%	24	30.4%
Survey design (n=78)	32	41.0%	32	41.0%	14	18.0%

Survey participants indicated that their preferred method of training was a half day workshop (n=62, 67%) followed by a full day workshop (47%, n=47). 'Other' included supports for training such as greater collaboration between organisations (n=1), provision of templates for evaluation (n=1), evidence about past successful programs (n=1). Supports identified as being beneficial to their work role included injury data (88%, n=82) and fact sheets (77%, n=72) (see Table 15).

Table 15. Sector needs (n=93)

Mode of training	n	%
Half day workshop	62	67
Full day workshop	44	47
Forum/Seminar	43	46
Webinar	40	43
Short course	40	43
Customised training for your workplace	31	33
Conference	28	30
Other	3	3

Identified supports	n	%
Injury data	82	88
Fact sheets	72	77
Injury area evidence	61	66
Networking opportunities	60	65
Templates for program planning	55	59
Grant / funding	50	54

Although not specifically asked, suggestions emerged from interviewees on the future needs of the sector and the role that Know Injury could play. This included:

- Greater effort to raise the profile of the sector which would provide a more identifiable profile and allow for greater collaboration and advocacy approaches etc.
- Continued access and availability of professional development especially in regional areas, which reported higher levels of staff turnover and inexperienced staff.
- Greater support for those in the regional areas understanding that the profile of injury epidemiology is different in different regions e.g. road trauma from high speed country driving is different from the metropolitan situation
- Greater role in providing sector-wide strategic direction:

  Injury Matters could provide more set of, you know, direction for injury prevention for the sector. Because I'd say Injury Matters is our lead agency here across the state in injury prevention. So, I guess, you know, working with the Department of Health, working with, you know, the local government … there are many issues arise … if they give the directions, or you know, give the directions to the organisations around. (ID08, state government)

- Greater profile and public relations for the program (Know Injury):

  Maybe if they [Know Injury] *did a travel show. You know, went around the rural town. That would certainly raise their profile and get more engagement. And especially if it was, you know, they could do something that was maybe half technical, half professional, would be fantastic, that would be lovely*. (ID09, local government)

WHAT DOES THE SECTOR KNOW ABOUT *KNOW INJURY*?

Direct recall of engagement with Know Injury was inconsistent amongst interviewees. While some interviewees had not participated directly in Know Injury activities, several interviewees had been very engaged with Know Injury and were complimentary about the program and the agency:

> *Getting resources and all the networking, it's that kind of high level of bringing everybody together in that injury prevention site. To share information and learn more.* (ID05, local government)

Interviewees who did know of Know Injury provided feedback on areas that it did well including:

- Website, newsletters, factsheets and other online resources
- Responsive with information provision
- Professional development training and webinars
- Support through travel grants to attend events
- Facilitating networking and partnerships within the sector

Online resources seem to be the most widely used, recalled and accessed part of Know Injury:

> *I quickly access it online. Or I access it through the emails that come through. So, I'll have a look at their email, see if there's anything pertinent to what I'm doing, or my role and I'll have a look. I probably use them for statistical information*. (ID09, local government)

The resources and information provided by Know Injury was seen by this respondent as particularly useful:

> *They* [Know Injury], *have all these resources, information, you know, broken down into different sectors, like … drowning, and then falls, and then road trauma, … and every day I'm looking on their website and get information for what you're looking for. And obviously, you know, that's a great content as well for any injury prevention work I will be doing, I will basically be looking at that first and getting information from there on.* (ID08, state government)

This interviewee described the impact of training and networking delivered by Know Injury:

> *They've got the regional network meetings. Either sort of on site or around the state. They have training, which there is a training here at Bunbury that they're running, around improving evaluation. I went along at the summits that they've had, and the awards as well. My program won an award. I went up to that summit. So yeah, I had a CONNECT.ed opportunity, so I signed up for that.* (ID05, local government)

However this sentiment was not universally expressed with this interviewee suggesting that Know Injury could be more proactive in assisting with improving relationships:

> *Nothing came from it* [CONNECT.ed]…*Had one or two catch-up, then nothing's come from that relationship. And maybe that's a fault by myself or the other person. In terms of a regional networking meetings that I have once a quarter, I found them to be much the same. They're lovely people, a nice meeting. I did expect that something would come out of it…But nothing other than information dissemination… Perhaps there could be some education around that, you know? How we can make those connected relationships work a little bit better, you know? Like how to have better relationships.* (ID11, non-government organisation)

However, the value of the Know Injury Regional Network Group when working in regional areas was highlighted by this interviewee:

> *The Regional Network has been extremely useful for injury prevention work that I do. Because that's the only network in the state that I can see, you know, where the professionals are who are working in that sector, they come together, and they share ideas and, you know, they share the projects as well. …. The Connect program I have attended a couple of times, I have communicated a couple of times to the professionals who have been connected to me, but not always, because sometimes, you know, you need to find time for that and sometimes it feels like that's fallen, you know, from the list.* (ID08, state government)

The same interviewee went on to describe the impact that involvement with Know Injury had on improved partnerships in the sector:

> *By attending the Regional Network meetings, it has improved the partnerships. We have attended, previously, one injury prevention summit as well … and that was extremely very useful to attend as well, because, you know, it was challenging me with other like-minded people and organisations … and the evidence data definitely is and once you have the sort of information, I think the programs become easier as well. And more efficient, you know, in terms of delivering the programs, because, you know, you have access to the evidence and the resources.* (ID08, state government)

The remainder of interviewees indicated lower levels of knowledge and awareness of Know Injury specifically and a lack of understanding that Injury Matters was the name of the organisation that ran Know Injury (most likely to do with the recent organisational rebranding).

> *I think they're doing quite a lot and I think they do it well. I just don't think that we're aware or don't think of them as a first port of call for a lot of information. Yes. I think they're doing just. I think their*

> *resources are really good. I think like I said before, the training's really good*. (ID09, local government)

This is illustrated here, where whilst the interviewee had unclear recall of program names, they indicated that they had participated in a Know Injury event:

> *I think they have webinars, I think they have a series of webinars that I tuned into, so. The webinars are always very good. Webinars are great for us,* [in the regions]. (ID09, local government)

There were also several other interviewees who gave very confused answers when asked about Know Injury. For example, an interviewee said categorically they did not know of Know Injury and had not interacted with Injury Matters, "*I have seen it, but I really don't know anything about it*." (ID01, state government) but later with some further prompting they answered the following about Injury Matters:

> *I know that they do, or they offer up training, and that's a bit of a, like a prevention network database, and, certainly, linking in with that would be beneficial, help us do our work better. And, yeah. No, I think just understand a little bit more around what I can do on the ground in terms of support, that would be helpful.* (ID01, state government)

Confusion is also illustrated here:

> *Right. So, if I asked you, have you, or what do you know about the program called Know Injury, K-N-O-W, Know Injury, would you be able to tell me anything? (Interviewer)*
>
> *No. I'm not too sure exactly what's going on there. It may be I know about it, but don't put the name to what's going on. So, I'm not too sure.* (ID04, local government)

However, low awareness of Know Injury also related to perceived relevance, sometimes a result of organisations accessing what they saw as more applicable resources and support for their specific roles. For example one interviewee cited working closely with WorkSafe (specifically set up to assist in achieving safe workplaces). Thus they reported little motivation to access Injury Matters or Know Injury because of this rather than lack of awareness of their existence. Similarly, in the road safety area some interviewees relied on the National Road Safety Partnership Program for support rather than accessing Know Injury. This was also the case in one local council managing OHS where they outsourced information and training:

> *… our insurance and local government have insurers that also are training programs and assistance in that area. So, we always refer through to them.* (ID06, local government)

While Know Injury was not necessarily always top of mind for assistance, this appeared reflective of the breadth of injury prevention and safety promotion as well as the number of different players:

> *But I would not think, that for example, suicide prevention training. I would not think of going to Know Injury, I would go to the Mental Health Commission, I would go to the Suicide Prevention Guide, I would go to Suicide Prevention Australia but I would never think of going to Know Injury for suicide prevention training.* (ID09, local government)

DISCUSSION

This research contributes valuable insights into the current profile of the injury prevention and safety promotion sector in Western Australia. This is the first research conducted in WA to better understand the composition of the injury prevention and safety promotion workforce, its activities and examine key barriers and facilitators for best practice injury prevention and safety promotion.

IDENTITY AND CLASSIFICATION

There is debate in the literature about the distinctions between various components of what might broadly be termed the public health workforce.[8] The current research corroborates this with results suggesting confusion around the scope and boundaries of the injury prevention and safety promotion workforce and its activities. This mirrors definitional challenges found in other areas of public health. [7,8] As with previous findings about the preventive health workforce[7,8] and historical findings nationally about the injury prevention workforce,[9] this research suggests that the WA injury prevention and safety promotion workforce is highly heterogeneous and multidisciplinary with porous boundaries. It contains a variety of organisations and occupations; conducts a wide variety of activities at different levels; and contains few practitioners who identify as injury prevention or safety promotion specialists. Previous research has suggested that a lack of specialist workforce may reduce effectiveness of programs and services.[5] However, there are also a range of benefits in such a diverse workforce. There are opportunities to leverage this to expand capacity in injury prevention and safety promotion efforts across broader sectors.

Interestingly, initially a proportion of survey participants (17.4%) indicated that they did not identify as working within the injury prevention and safety promotion sector. However, a small proportion specified that they worked within injury areas or their organisation was involved in the sector (6.5%). It may be the case that individuals and organisations themselves have a direct or indirect impact on injury prevention and safety promotion without identifying with that workforce per se. Understanding the reasons there is a failure to identify with the injury prevention and safety promotion sector is important to achieving a cohesive and collaborative workforce. Having an agreed definition of injury may assist in addressing this issue.

Similar to findings by Rogers et al., we found that the workforce in this study was segmented by whether injury prevention and safety promotion was a core or non-core activity. For example organisations such as Kidsafe and Royal Life Saving Society of Western Australia were viewed as core organisations as they has an explicit focus on injury. Rogers et al., further delineated between non-core organisations where health outcomes were ancillary to services provided (in this research those such as local government) or where the workforce was latent (currently not engaged but who have capacity or are appropriately situated) (not captured in the current research). Historical research of the injury workforce in Australia,[9] and subsequent work to document the national prevention workforce[7,8] also found broad delineation between those considered to work directly or indirectly in injury and prevention.

Consequently because of these factors and the significant influence of the non-core or indirect components of the workforce, size is difficult to accurately enumerate.[5,7,8,9] Our review of the literature found limited reference to the injury workforce, and indeed to the classification of the broader public health workforce. Additionally it appears that since the last attempt at the national level to quantify and classify the injury prevention workforce, [9] some resources such as a national directory of practitioners (Australian Directory of Injury Control Personnel) are no longer available. This would suggest opportunities for further research to develop some effective measures for the size and scope of the workforce. Membership of the Australasian Injury Prevention Network (AIPN) or of professional associations may serve as proxy measures in the first instance for the workforce nationally.

CONFIDENCE, COMPETENCE AND PROFESSSIONAL DEVELOPMENT

Those working in injury prevention and safety promotion require a broad range of skills and knowledge. This includes those consistent with wider public health competencies for program development and delivery as well as injury or safety content knowledge and expertise. This may differ depending in part on whether the individual or organisation undertakes injury prevention and safety promotion as a core or non-core function of their work. Accordingly one area of increased focus is working more closely with the non-core and indirect components of the workforce to influence broader contextual services, programs and policy. [9]

From the literature, there appears to have been limited work in Australia to develop core competencies or capabilities of practice for injury prevention and safety promotion. However, whilst Australia currently lacks a clear set of competencies specific to the injury prevention and safety promotion sector, internationally moves have been made to explore what unique competencies might be required of this workforce.[12] This parallels movement by the health promotion, public health and nutrition workforces (locally and internationally) where progress has been made on agreed to competencies.[5]* Opportunities to continue to work on a competencies framework unique to this workforce remain, consistent with recommendations in work from the early 2000s.[9]

A 2012 audit[7] of the preventive health workforce in Australia defined four competencies which are pertinent to the injury prevention and safety promotion sector. These included: strengthening capacity within the workforce; utilising health promotion practitioners; understanding the needs of health promotion graduate training; and the need for senior practitioners within the industry. Findings from this survey showed that the majority of participants held a tertiary degree, and had spent five to 10 years working in the sector which is promising when linking to broader competencies. In this research, confidence levels around undertaking program planning evaluation and advocacy were promising among participants as these are important skills for effective program development and to ensure best-practice injury prevention and safety promotion. However, there are opportunities to undertake training as not all participants are 'very or somewhat confident' in undertaking all work tasks. This lack of confidence was especially evident for research activities and grant writing.

In regard to learning opportunities, participants' indicated that they were most interested in knowing more around the injury area they work in and program planning. Half day and full day workshops was considered the preferred training mode. Professional development of the sector workforce was also seen as important by interviewees. Programs informed by a good evidence base appeared to be a common theme for most participants and indicates the need to ensure that an accurate and accessible evidence base continues to be made available. This need had been met by both professional development delivered by Know Injury or by industry sector specialist professional development.

There is also recognition that there may be additional unmet capacity building needs for those working with more marginalised or hard to reach groups or locations which may require additional skills. As suggested by previous research, training will continue to be required. However ad-hoc training may not serve to adequately address these needs alone. A greater level of partnership may be required to develop consistent and credible training offered to the majority of the sector. This training should occur within the context of the injury prevention and safety promotion system paying particular attention to the range of policy and organisational factors at play within the various sector components.[9] It is prudent to note that training cannot substitute a shortfall in staffing and resources alone and accordingly it is likely that strong advocacy is also required for better service planning and resourcing.

* See for example work by the International Union for Health Promotion and Education, the Australian Health Promotion Association and the Council of Academic Public Health Institutions Australasia

CHALLENGES

Similar to findings from Begley and Pollard,[5] a range of human, financial and organisational factors were identified in this research as issues for the injury prevention and safety promotion workforce. These broadly related to 1) internal work issues; 2) external systems; 3) low injury topic knowledge; 4) sector awareness of injury prevention; and 5) community. Some of these issues cannot be addressed easily without systemic consideration of workforce planning and resourcing, but some may be addressed by better partnerships with the non-core components of the workforce to address gaps in service, particularly in areas which lack stable, experienced staffing. Further, some areas will require policy and advocacy solutions, which is a role for the sector collectively and agencies such as Injury Matters to lead. This review again highlights the challenges of resourcing and competing priorities for those working in regional, rural and remote locations. As noted in a previous review by Health Workforce Australia[16] there are long-term vacancies in regional areas both across the health system and more broadly. In relation to public health roles, these often 'disappear' with health system rationalisation leading to limited service provision or resourcing. This can in part be ameliorated by central services in the metropolitan area delivering services statewide. However, the high level of staff turn-over and vacancies experienced in these locations, along with the geographical specificity of issues, means that more tailored support may be warranted.

LEADING AND COLLABORATING

Establishing lead agencies in the sector is important in understanding the workforce in relation to future sector needs, such as training, and is integral to strengthening the sector's capability. In terms of collaboration, Injury Matters and Local Government were the most frequently mentioned and Injury Matters (63%) and KidSafe (27%) were most frequently thought of when participants considered the injury prevention and safety promotion sector. Few interviewees reported a high level of engagement with or knowledge of the Know Injury program, however those that did reported positive engagement. There continued to be confusion about the relationship between Know Injury and Injury Matters (i.e. that the former is a program of the organisation Injury Matters). Accordingly, there appears to be an untapped potential for Injury Matters to raise their profile and engage more closely across the sector. There would appear to be a requirement to also clearly market the organisation versus the programs they deliver. Accordingly there is a role for a peak body in providing sector-wide strategic direction and in harnessing the disparate components of the sector to build momentum in raising the profile of the sector to support partnership and advocacy endeavours.

CONCLUSION

The purpose of this research was to provide contemporary information on the current state of the injury prevention and safety promotion workforce in WA, including the characteristics and activities of individuals and organisations. Findings demonstrate significant heterogeneity with a core workforce supported by a range of non-core and indirect actors. Conclusions from the research suggest the need to more regularly audit the sector to determine its breadth and composition. Viewing the injury prevention and safety promotion sector as a system composed of individuals and organisation requires an understanding of relationships and networks, and how these change and evolve according to context and time.[8] Recognising and exploring the range of core and non-core actors connected to this sector is critical to evaluate their impact on the multiple socio-ecological determinants which influence injury and safety. This research has provided the first step to exploring these issues. In light of recent announcement by the Commonwealth for a new national Injury Prevention Strategy, this study provides timely insights into the injury prevention and safety promotion sector in Western Australia.

[16] Mason S. Review of Australian Government Health Workforce Programs. Adelaide: Health Workforce Australia; 2013

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