PREVENTING SUICIDE IN THE NORTH

DEVELOPING CAPACITY

LOCAL KNOWLEDGE AND SKILLS

REPORT 24 OCTOBER 2016

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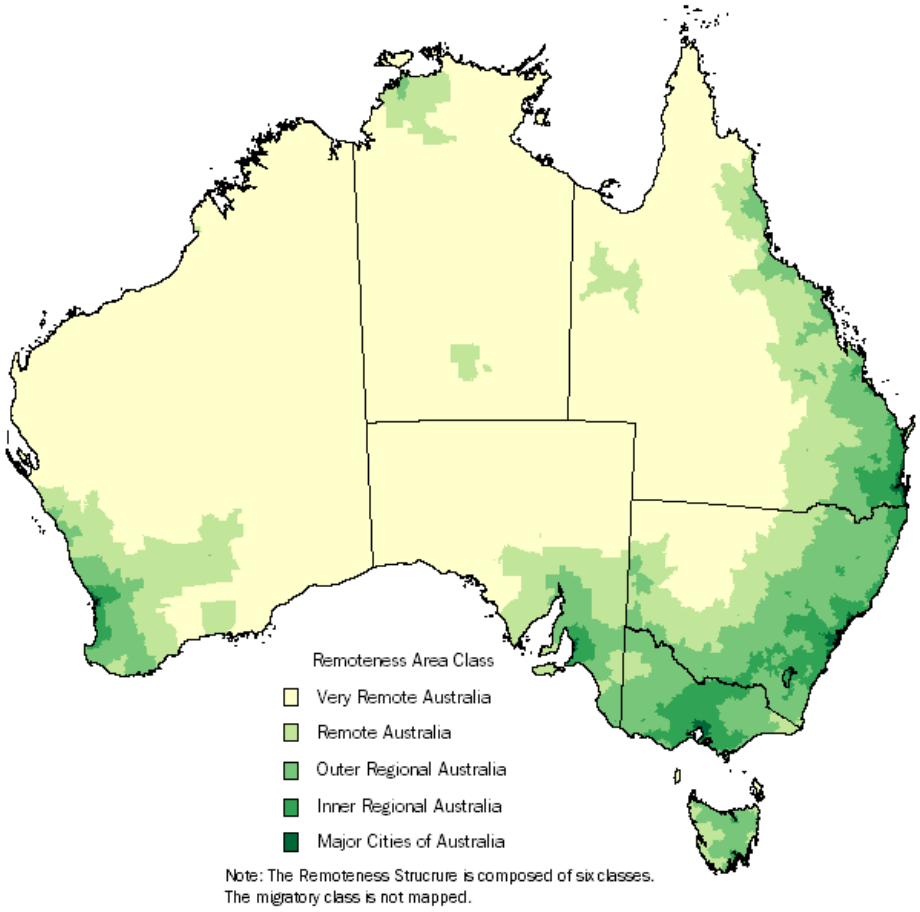
TABLE OF CONTENTS

Background

This report grew out of the recognition that while suicide is an outcome the circumstances and contributing factors to suicide are variable from one part of Australia to another due to regional differences and contexts. Drought, flood, unemployment, financial strain, family relationship breakdown, and commonly depression and other mental health conditions are all circumstances that are known to increase risk, as does being born into an Aboriginal or Torres Strait Islander family. The Northern region centred on Townsville (pop. Est. 200000) includes rural and somewhat isolated communities (e.g., Paluma with 30 residents) ranging from a few hundred residents (e.g., Ravenswood, 349), to Ayr and Home Hill in the Burdekin with about 18 to 20000 residents, and Charters Towers (est. 8300) a large proportion[1] of Aboriginal and Torres Strait Islander residents, Palm island (est. 5000), and a military presence (including families est. >45000). This somewhat unique mix makes for greater complexity in developing a suicide prevention framework suited to this region, planning what to do, and defining the "how to" applications of suicide prevention.



Map 1. **Australian Standard Geographic Classification Remoteness Areas**

[1] There are various estimates of number of Aboriginal and Torres Strait Islander peoples living in the region around Townsville.

Executive Summary Points

- Stigma affects perception of suicide risk and must be a primary target of prevention
- Suicide has a ripple effect that affects many and ***might*** persist and fuel suicide clusters
- Male suicides are high nationally and the local region is higher still
- Female suicide is low by comparison with males
- Male rates are the highest per 100000 escalating after 70 years and peaking after 85
- In raw numbers young men die in larger numbers but lower than the rate for older men
- More men from major cities die but the rate increases for as remoteness increases
- By occupation, Registered Nurses are highest, but Farmers/Farm Managers/Agricultural workers are a close second and most often the method was firearms, hanging, and vehicle exhaust
- In Queensland suicide rates go up as remoteness increases and age of suicide goes down
- Indigenous people suicide in Queensland at more than 3 times the rate of non-Indigenous
- Methods of Suicide in Queensland (Appendix A) tend toward hanging for men and overdosing for women (but not exclusively)
- Across the NQPHN for three years 2011-2013 the suicide rate was 1.2 times higher than Queensland generally
- In the NQPHN area Aboriginal and Torres Strait Islanders suicide 1.2 times more frequently than Queensland generally, and 1.5 times more than the overall national rate ratio.
- By Postcode in the Townsville city area postcodes 4810 and 4817 are 1.3 times higher than Queensland generally;
    - Townsville district postcode 4816 is 2.5 times higher than Queensland
    - Burdekin postcode 4807 is 1.3 times higher than Queensland
    - Bowen and Proserpine Postcodes 4800, 4802, 4805, vary from 2.1 to2.7 times higher than Queensland.
    - Ingham Postcode 4850 is 2.8 times higher than Queensland.
- Mental Health and Suicide literacy Goldney (2002) found low literacy amongst suicidal depressed people and these found most “help” harmful except for a few who found close family and friends and Clergy, minister or priest helpful.
- Stigma has been found in multiple studies to blind people to suicide risk in themselves and others, and prevent help seeking, and help offering in one small study.
- Mental Health practitioners generally hold less stigmatising attitudes to suicide, but may not be different to everyone else on implicit (out of conscious awareness stigma)
- Empathy in (mostly) females was found to relate to better suicide awareness and less stigma
- No evidence has been found that stigma in males living in rural and remote communities is higher than men living in regional towns or metropolitan areas.
- Lived experience of a close other suiciding did not translate into recognising risk and offering help in one small study and stigma was evident in participants narratives.
- Suicide clusters and contagion are “fuzzy” concepts with loose definitions and seem to be more prevalent in small and fairly remote locations. Contextual factors are: commonly young males, alcohol and substance use, proceeded by interpersonal conflicts and in families with previous suicides.
- A study in the USA suggests that persistent and pervasive grief from 2 to 7 years after a cluster event increases distress and stigmatising beliefs persist. Social support is important to recovery

of some. Ongoing distress might increase the suicide risk of the prolonged grief group. No similar studies have been done in Australia.

- Multiple barriers to help seeking are identified in Table 9 – for more at risk individuals online sources of help are better than face to face in one study.
- Help offering is an under-develop set of skills in suicide prevention but critically important to supporting a suicidal individual.
- Women with lived experience in one small study showed that could hold two opposing positions recognising and supporting a suicidal person on the one hand, but not recognising that the suicidal person could not cope independently to seek help because they had "reasons for living"
- The Interpersonal Theory of Suicide provides a framework for understanding suicide and suicide risk. It also provides a brief assessment for the warning signs of suicide that is easy to remember
- Ross' theory of trust provides an understanding of how powerlessness might intersect with sociocultural factors to increase risk amongst disadvantaged people and help explain suicide in Aboriginal communities in particular.
- Suicide prevention is a multi-faceted concept that means in discussion people can use the term but mean very different things. The systems approach might provide the TSPN with a clear way to avoid such obstacles.
- The systems model of suicide prevention is being implemented in at least three states currently and is the preferred evidence based model and integrates with the Promote Life Model Fig 4.
- Evaluation should be considered an imperative to show the integrity of the developed framework devised to suit the local communities. Krysinska (2016) found that the strategies likely to have greatest impact are psychosocial treatment/interventions and general practitioner training as well as reducing access to means.
- Planning at the local level will need to consider local services, and existing prevention initiatives and gaps through an audit prior to making decisions to avoid replication.
- The evidence of effectiveness is weakest for community awareness programs and there is good pedagogical reasons for combining such programs with an active learning program to increase retention of knowledge about risk and prevention.
- Valuing the lived experience of suicide and making it explicit is currently a trend in suicide prevention as it is likely powerfully inform the work of the TSPN.
- Inclusion of people from diverse background (Table 13) who know the community at grass roots level are likely to open opportunities to identify niches of need amongst high risk groups commonly overlooked in the larger systems of health and primary care
- Engagement with the broader community by seeking out opportunities e.g., to send a guest speaker to talk to clubs or service organisations, or professional development days.
- Developing communication skills about suicide and suicide prevention should be part of the TSPN planning process. Communicating "cleanly" so that others receive the message sent unambiguously is an ability that will improve the dissemination of the work of the TSPN.

Suicide Contexts and Effects

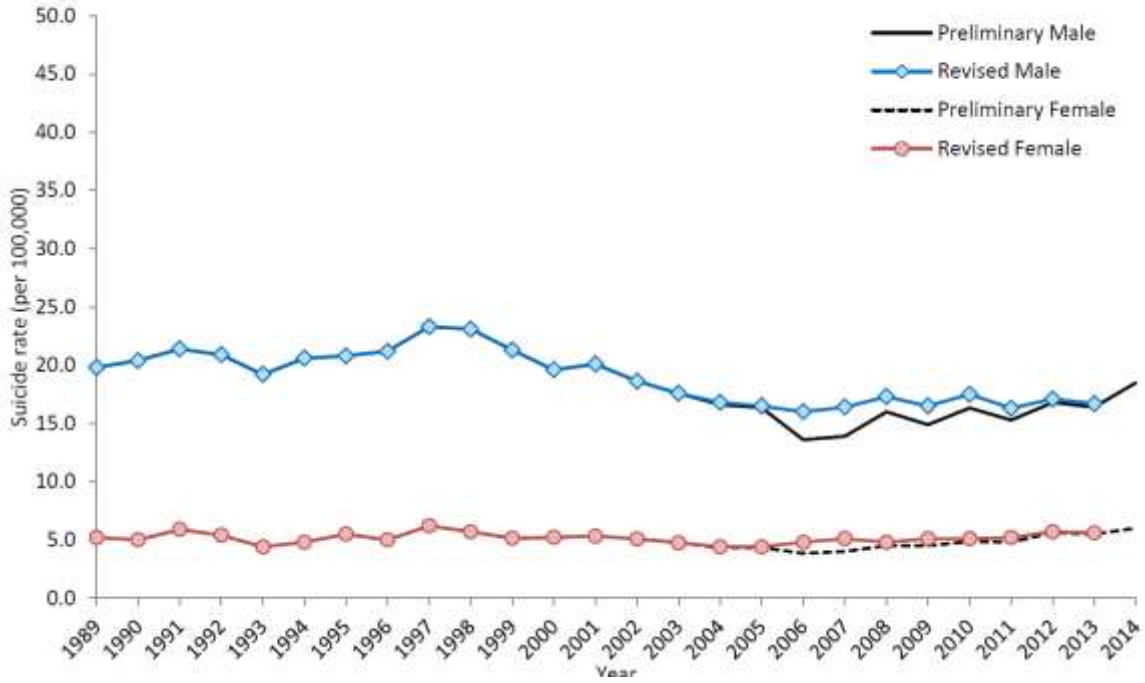
In a recent study from the USA (Cerel et al., 2016) it was estimated that 135 people were affected in some way by each suicide. A similar study has not been conducted in Australia however, the recent report for Suicide Prevention Australia *The Ripple Effect: understanding the exposure and impact of suicide in Australia* (Maple, 2016) found that 85 to 89% of the 3220 in their study reported being exposed to a suicide attempt or the suicide death of a person known to them and most commonly reported that it was a friend or brother who had suicided (32%). If the same equation of people affected in the US applies in Australia then the estimated number of people impacted by suicide would be in the order of 386640 people based on the ABS 2014 statistics (2864 suicides). If Australians who attempted suicide were added using the same US rate of 135 people affected per suicide attempt then it would be in the millions. Suicide has, as the 2016 report states in its title, "a ripple effect" affecting people at all levels, individual, family, social network, and community.

Australian Suicide Statistics

Preliminary suicide Rates (2014) released in 2016

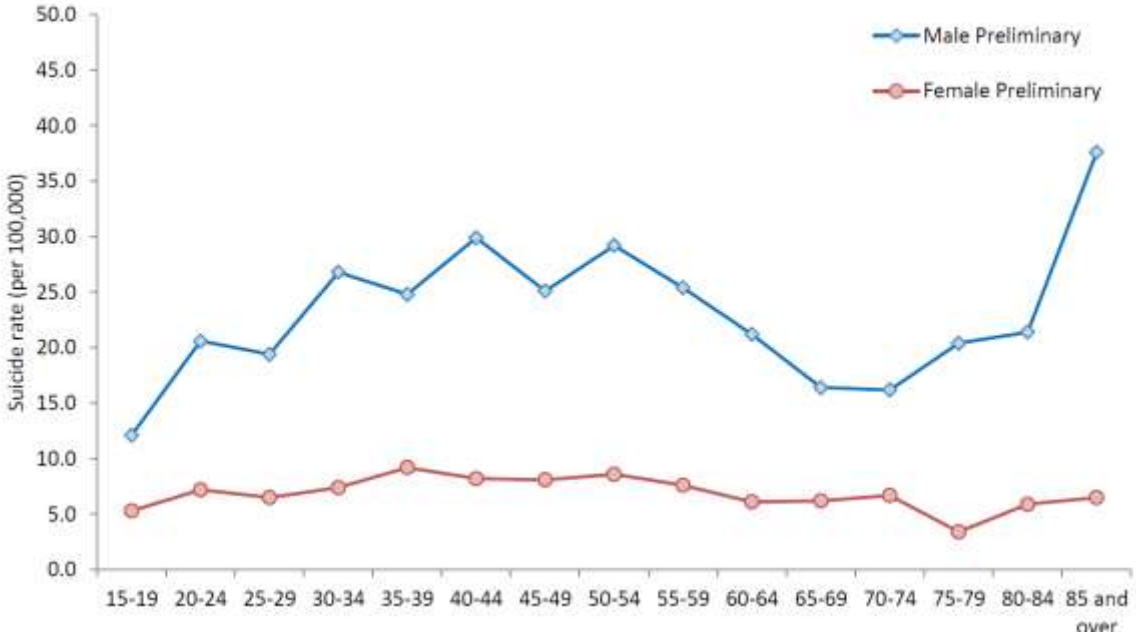
Overall the suicide rate in Australia has remained reasonably stable for females and males as the following Figure 1 shows (Hunter Institute of Mental Health, 2016) based on ABS figures released in March 2016. It is obvious that the rate for males has been consistently too high for the past 25 years varying between 15 and 20+ per 100000 persons and resistant to all attempts to reduce it.

Figure 1. Preliminary and Revised Suicide Rates (1989 – 2014)



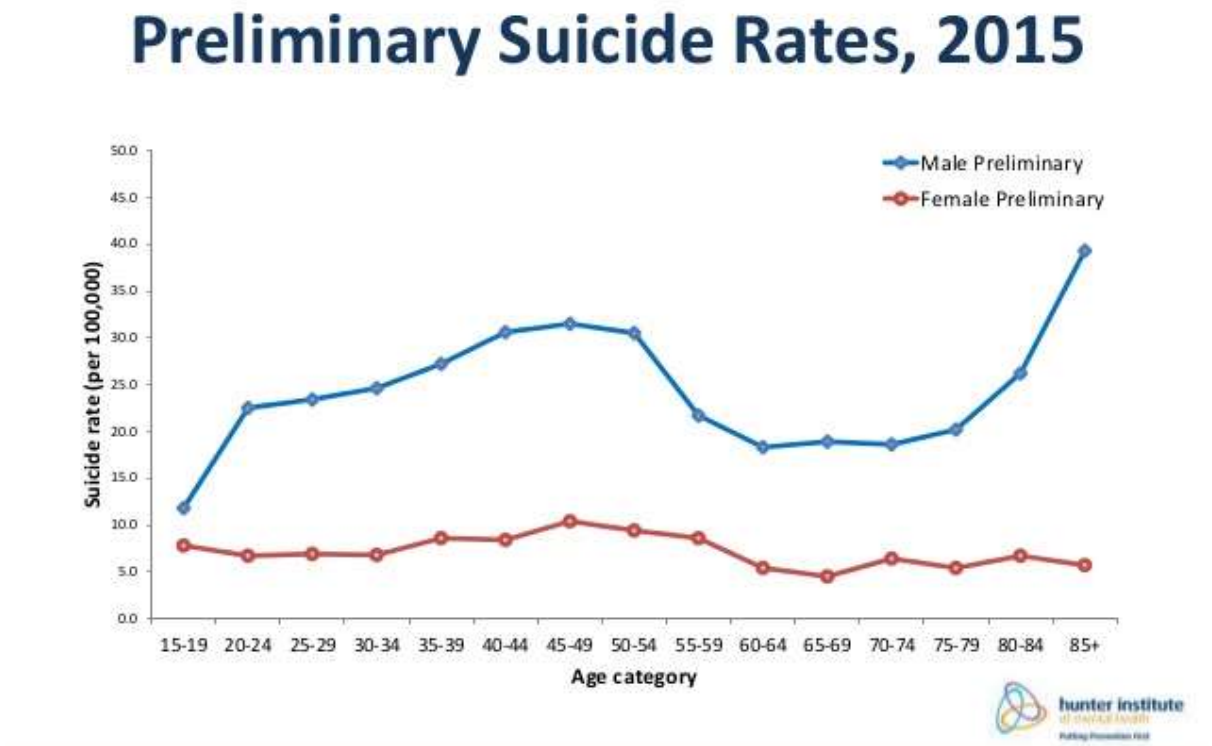
When broken down by age groups the trend in suicides is amplified. While we hear more about young people who suicide in larger numbers the rate or percentages of suicide by age group for men escalates skywards from 70 years of age onwards (Figure 2). At least some of these men will be agricultural workers, farmers and graziers in our region who have been experiencing drought for most of the last five years.

Figure 2. Preliminary Suicide Rates, 2014



Preliminary Data from Australian suicide rates from 2015 published on 28 September 2016 from the Hunter Institute of Mental Health (http://www.mindframe-media.info/for-media/reporting-suicide/facts-and-stats) shows little if any change from 2014.

Figure 2a. Update -Preliminary suicide rates 2015



Regional, rural and remote factors

Suicide is difficult to separate out as a cause of death from accidents and other unexpected events that occur more frequently in rural industries that can include mining, mills, long haul driving and similar occupations. The Remoteness Classification that is part of the Australian Standard Geographical Classification (ASGC RA)[2] describes Townsville as Outer Regional and locations within a 90 minute drive from Townsville as Remote. Within this area there are many farms and related industries that incorporate regular use of heavy machinery, firearms and dangerous chemicals increasing the potential for accidental or deliberate self-injury/death.

A background note on Suicide in Australia (Parliamentary Library, 2011) shows that as remoteness increases so does the rate of suicide and as remoteness increases so does the proportion of low Socio-economic Status residents and health problems (AIHW, 2010). For most causes of death mortality rates are higher due to poorer health outside major cities as remoteness increases and availability of services decreases. These issues complicate the interpretation of suicide statistics. The identifiable suicide rate for example is 33% higher outside major cities however, so too are other external causes at 38% some of which might be deliberate life-ending events (Explanatory Note 1, Ap. E)

> Overall, male death rates increase with remoteness (Appendix Table B7). For example, in *Inner regional* areas death rates were 8% higher than *Major cities* and in *Very remote* areas, 78% higher. The pattern of higher mortality with increasing remoteness was generally consistent across all age groups (Figure 9).Death rates among younger men were notably higher outside *Major cities* than within them. For example death rates among men aged 15–24 years were around 80% higher. Much of this difference is due to high Indigenous death rates among young adults. (p. 27, AIHW, 2010)
>
> *Note. Figure 9 p. 27 AIHW (2010) has not been reproduced for this report.*

The death by suicide comparison of remoteness classification areas to major cities is obvious from the Parliamentary Library (2011) background note (p. 11) as shown in the following table from years 2004 to 2006.

Table 1. Male deaths by suicide in Major Cities compared to Outside Major Cities

Remoteness Classification Area	Major Cities vs Outside Major Cities[1]	Total Males[2]	Non-Indigenous Males[2]
Major Cities	2797	1.00	1.00
Inner Regional	1881	1.18	1.46
Outer Regional		1.43	1.59
Remote		1.78	1.43
Very Remote		2.89	1.25
Outside Major Cities		**1.33**	**1.50**

Note. 1. The blue band is the overall suicide count outside major cities in the years 2004-2006; 2. Standardised mortality ratios in these columns refers to the ratio of observed deaths to expected deaths (*e.g., Total males outside major cities die by suicide 1.33 times and 1.5 [non-Indigenous males] more often than expected*).

The statistics are quite inconclusive for suicides amongst rural occupations and there has been surprisingly little research in this area. Gunn, Langley, Dundas and McCaul (1996) defined suicide as 'the tangible outcome with an unequivocal nexus to stress', and reported South Australian suicides

[2] Refer to the map on the "Background" page

according to occupation for the years 1990 to 1993 (456 had occupations recorded; Males 387, Females 69). Australian suicides for that year were 2083 *(*Males 1689 and Females 394). The following table sets out a comparison for farmers and farm managers compared to registered nurses from the highest rating occupation. Miners are not at greater risk (McPhedran et al., 2013 & 2015)

Table 2. Comparison of suicide rates per 100000 (person-years) for farmers/agricultural workers with registered nurses in SA 1990-3

	Males		Females	
Occupation	**Australia 1993**	**SA 1990-1993**	**Australia 1993**	**SA 1990-1993**
Farmers/ Farm Managers	47.7	19	6.1[1]	7[1]
Agricultural workers	54.6	64.2	5.1[1]	13.2[1]
Registered Nurses	55.9[2]	42.2[2]	16.3	26.5

Note. 1. Indicates that the statistic could be unstable due to the low number of suicides. 2. The gender imbalance in nursing show that the position is reversed for registered nurses where the statistic could be unstable for males.

Farmers and agricultural labourers/ related workers were identified as a high risk occupation in the Australian data by comparison with other managers and labourers. Male farmers and farm managers were not a high risk in the South Australia state statistics (Gunn et al., 1996). Page and Fragar (2002) in a study of 921 suicides (1988 to 1997) found that the majority (67.4%) were farm managers and were predominantly in the 55 and over age group (48.5%) whereas agricultural labourers who suicided (61.4%) were in the 15 to 39 years age group. The most common methods of suicide (81%) for both groups were firearms, hanging, and motor vehicle exhaust gas.

The situation in Queensland seems to reflect the earlier research. Anderson, Hawgood, Klieve et al., (2010) reviewed evidence from the Queensland State Suicide Register for the years 1990 to 2006 and found 206 suicides (male and female) in Agriculture representing a rate of 24.1 per 100000. Ninety-four percent of the suicides were male and the rate per 100000 was 32.3. Female suicides were low in number (12) representing a rate of 4.7 per 100000. Queensland Farmers suicide at twice of the rate of those in NSW although between state differences in recording suicides could partially explain the difference (Arnautovska, et al., 2016). Male agricultural workers are a high risk group and there is a clear imperative now for further research into the occupational specific conditions and individual or other social –environmental factors that accentuate suicide risk according to authors Anderson et al. (2010) and supported by a systematic review across occupations at different skill levels (Milner et al., 2013)[3].

There is now some evidence (Kunde, et al., 2016), to explain the trajectories to suicide amongst 18 (Average age 53) farmers and agricultural workers based on suicide data (2007-2014). The qualitative study found that the method of suicide for 11 of 18 suicides was firearm, and seven through hanging. Three trajectories have been identified:

1. Romantic relationship issues and a brief suicidal process.
2. Established psychiatric disorder and a protracted suicidal process
3. Financial difficulties/pending retirement and an acute stress response to precipitating life events.

[3] Milner et al., compared across occupations in Australia and around the world using the International Standard Classification of Occupations (ISCO); Agricultural workers are level 6

Some of the common factors often speculated in the published literature were well founded in this study; drought, physical illness, mental health problems, access to firearms at the time of death, all in combination with triggering circumstances generating significant distress.

Queensland Suicide Statistics

The number of people who suicided in Queensland in 2014 cannot be known from Figure 1 and Figure 2 however Table "1" on the following page shows that by comparison with other states Queensland is comparatively similar to South Australia and Western Australia and all three states are well behind Northern Territory at 20.8 people per 100000. The percentage of Aboriginal and Torres Strait Islander Australians are proportionally higher in all of these states and territory. The number of Queensland males who died was 490 or 21 per 100000 of population, and 158 females or 6.6 per 100000. Where the proportion of Aboriginal and Torres Strait Islander Australians are a larger population of the Northern Territory female rates of suicide are 17 per 100000 more than double every other state and the rate for males is the highest in the country at 24.1 per 100000. It should be noted that in Tasmania where male suicides are an equivalent rate per 100000 as Western Australia the absolute number of people who suicided was 56.

A snapshot of Metropolitan and Remote suicides in Queensland (2008-2010) is captured in the following quotation from De Leo et al., (2013, p. xi). These statistics are taken from years 2008-10.

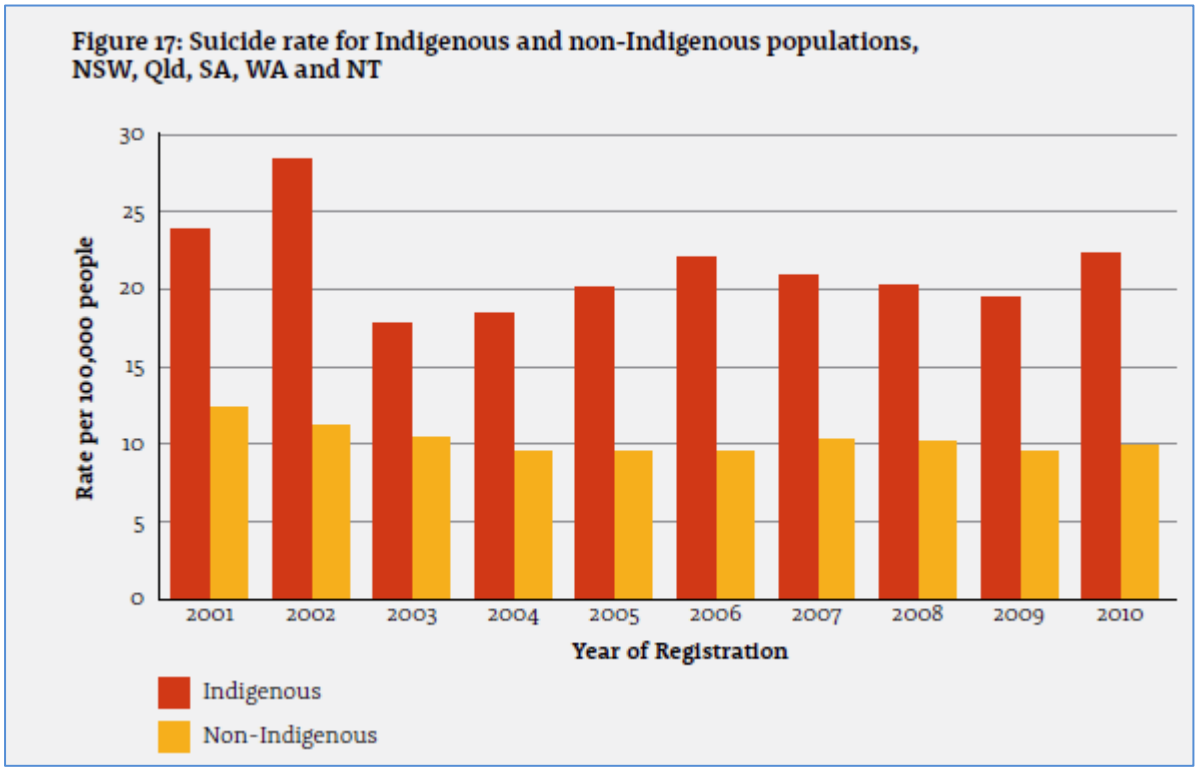
- Suicide rates for all persons were higher in remote areas (18.98 per 100,000) than in regional (15.31 per 100,000) or metropolitan areas (12.23 per 100,000) of Queensland.
- In remote areas, 43.6% of suicides were by persons aged less than 35 years, while in regional areas this percentage was 29.2% and in metropolitan areas 31.9%. All three areas had similar percentages of suicides occurring in oldest age group (55+ years), on average 27.2%.
- Hanging was the most common suicide method in all three areas, in metropolitan areas accounting for 44.9% of deaths, in regional for 45.1% and in remote for 59.0%. There was large variation in the use of firearms across areas – 4.9% in metropolitan, 13.4% in regional and 21.8% of all suicides in remote parts of Queensland. The reverse trend occurred in distribution of poisoning as a suicide method: 21.2% in metropolitan, 17.2% in regional and 6.4% in remote areas.

The majority of suicides cited in De Leo et al., (2013) for Queensland in the years 2008-10 were Caucasian (74.4%), and 4.7% were Aboriginal and/or Torres Strait Islander which reflects the differences in the proportional balance of the Queensland population (Aboriginal/Torres Strait Islander approx. 28% De Leo et al., 2011). One major difference however is the age distribution within the Indigenous populations with >37% children and adolescents up to 15 years of age. Another 55% were in the age bracket of 15 to 54 and about 8% aged 55 or older. During the 3yrs (2008-10) of the 84 Indigenous suicides; 67% were male, and 32.1% female with a ratio of male to female suicide of 2.1:1 which is significantly different from the ratio for others which is 3.1:1. The highest rates were in the 25-34 year old males, and 15-24 males (58.77 and 46.47 respectively per 100000), a rate 1.2 times more often than other Queenslander males. Female suicides in the age group 15-24 years (rate 32.45 per 100000) more than 4 times the Queensland rate and 1.6 times higher than other females. Across all ages Aboriginal and Torres Strait Islander persons were 1.3 times higher generally than other Queenslanders.

Table 1. Suicide count and rate by State/Territory and Sex, 2014.

State/Territory	Sex	Count	Rate (per 100,000)
New South Wales	Male	590	15.6
	Female	205	5.2
	Total persons	**795**	**10.3**
Victoria	Male	497	16.9
	Female	149	5.0
	Total persons	**646**	**10.8**
Queensland	Male	490	21.0
	Female	158	6.6
	Total persons	**648**	**13.7**
South Australia	Male	184	22.1
	Female	56	6.5
	Total persons	**240**	**14.2**
Western Australia	Male	282	21.5
	Female	92	7.2
	Total persons	**374**	**14.4**
Tasmania	Male	56	21.5
	Female	13	np
	Total	**69**	**12.7**
Northern Territory	Male	33	24.1
	Female	21	17.0
	Total persons	**54**	**20.8**
Australian Capital Territory	Male	28	14.6
	Female	10	np
	Total persons	**38**	**9.8**

The stark contrast between Indigenous and non-Indigenous suicides across a basket of 5 states shows the scale of the problem (Fig. 17, p. 89, A Contributing Life the 2013 National Report Card on Mental Health and Suicide Prevention). While these statistics are for the decade up to 2010 the situation has not changed for the better over time.



Males in Queensland suicide 3.1 times more often than females particularly in the over 75 year old age group, followed closely behind by the 35 to 44 year olds with no discernible change from 2010 to 2014. Females suicided most frequently in the 35 to 54 age range however, are generally less likely to suicide overall than men. There are also some identifiable differences in methods between males and females (Table 3).

Table 3. Methods of Suicide in Queensland[4]

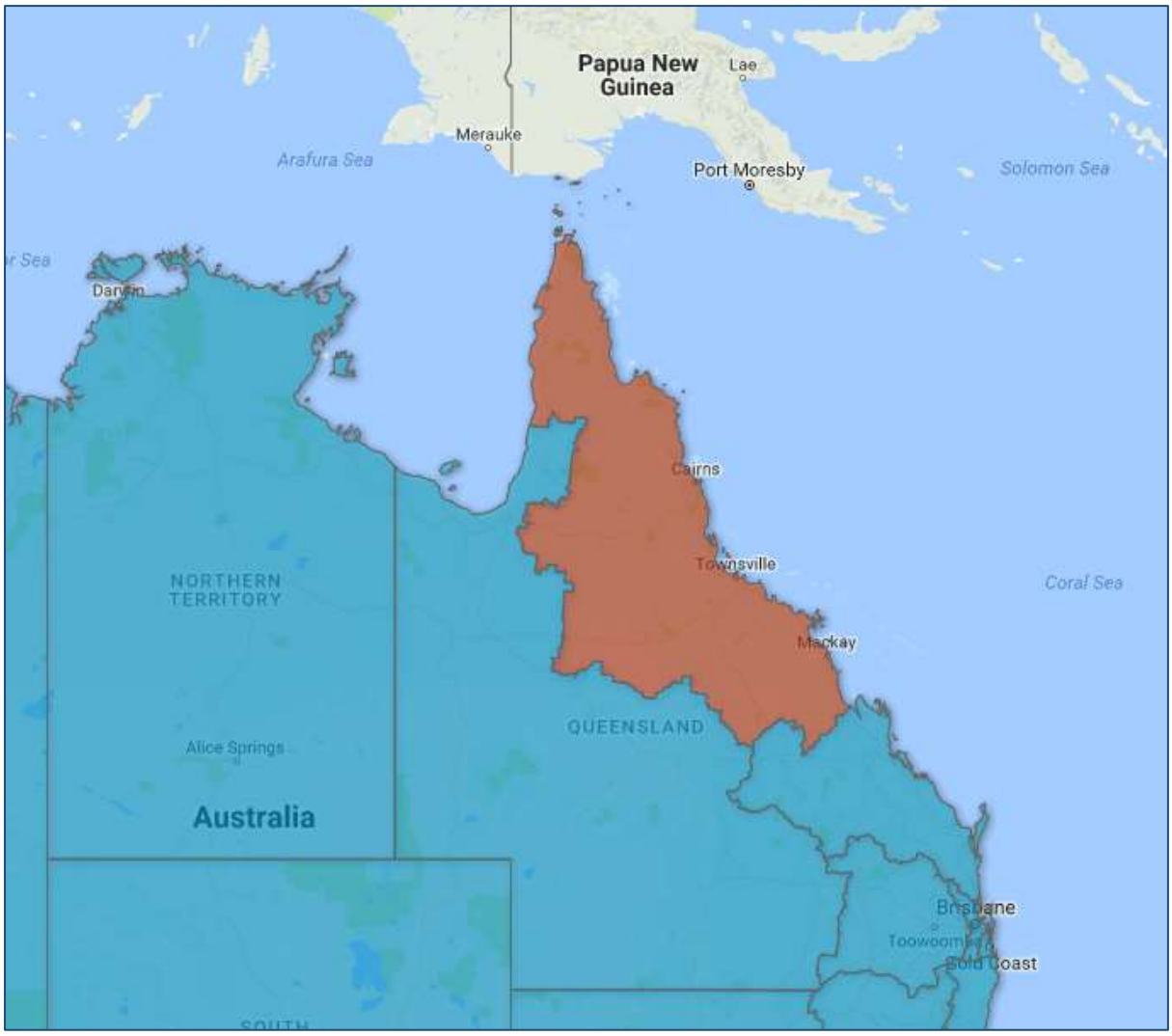
Method	Percentage of suicides	Most at Risk[1]
Hanging	45.6	Males
Drug or medicine overdose	18.2	Females
Firearms	9	Males
Carbon monoxide toxicity	7.5	Males
Jumping from heights	3.3	-
Being hit by a moving object	2.9	-
Suffocation by a plastic bag	2.8	-
Cutting by sharp objects	2.5	-
Drowning	2.2	-

Note. 1. There is no identified gender difference in some method categories.

[4] Refer Appendix A for further detail about differences in methods between Indigenous and Non-Indigenous Methods. The terminology Aboriginal and/or Torres Strait Islander has been used wherever possible.

Regional and Townsville Local suicide statistics[5]

The statistics used in this part of the report are derived from statistics collated by the Primary Health Network and circulated through the Townville Suicide Prevention Network during 2016. The Primary Healthcare Network includes extensive territory along the coast as shown in Map 2



Map 2 North Queensland Primary Health Network area of responsibility

The original data was drawn from the Queensland Suicide Register managed by the Australian Institute for Suicide research and Prevention (AISRAP).

Table 4. Suicides in NQPHN 2011-2013[5] per 100000 compared with Queensland as a whole

Source	Year	Male	Female	Total	RR/Qld
NQPHN	2011	22.4	7.6	15.1	1.2
	2012	26.7	8.9	17.9	1.2
	2013	29.2	6.6	18.1	1.2
Queensland		21	6.6	13.7	1

[5] The information used in this section is derived from the report, Suicides in Northern Queensland PHN region (PHN, 2016)

By comparison with Queensland (21) rates per 100000 the NQPHN territory is consistently higher over 3 years (22.4, 26.7, 29.2) particularly for males. Females were significantly higher in years 2011 and 2012 as shown in Table 4. When Aboriginal and Torres Strait Islander people are considered as a block it is very clear that although the overall proportion in the population is relatively small, the burden of distress due to suicide is affecting many more people if the equation of 135 persons per suicide is found to be accurate in the Australia context (Cerel, et al., 2016; Maple, et al., 2016).

Table 5 Aboriginal and Torres Strait Islander Suicides in NQPHN 2011-2013[5] per 100000 compared with Queensland as a whole.

Gender & Data Categories	Year	Aboriginal & Torres Strait Islanders	Rate Ratio (NQPHN/ National)[1]	Other Australians	Rate Ratio (NQPHN/ National)
Males	2011	46.6		21.7	
	2012	36.6		28.0	
	2013	43.3		30.2	
Females	2011	-		7.5	
	2012	-		9.0	
	2013	-		6.7	
Totals overall	2011	29.5		14.7	
	2012	24.5		18.6	
	2013	26.2		18.6	
NQPHN		26.7	1.2	17.1	1.5
NQPHN Males		42.0	1.2	26.4	1.5
Queensland[2]		20.5		13	

Note. 1. National rate for Males = 34.1; 2. NQPHN/Queensland response Rate is 1.3 for Aboriginal & TSI, and Other Australians

Table 5 clearly shows the differential between Aboriginal and Torres Strait Islander Males and Other Australians in the rate of suicide (per 100000) significantly higher than it is for other Australians. The Response rate for the NQPHN is one and half times higher than for other Australians generally i.e., males and females combined and 1.2 times higher than for other Indigenous persons at the national level.

The PHN also provided data by postcode which helps develop understanding of suicide rate and the statistically significant relationship to low socio-economic status, particularly for young men aged 20 to 34 (Page, Morrell, Taylor, Carter& Dudley, 2006). Post codes can be located through www.**postcodes**-australia.com/**postcodes**/

Highest rates of suicide generally corresponded to areas of economic disadvantage and a higher proportion of Aboriginal and Torres Strait Islander residents (Cantor, Slater & Najman, 1995; Page et al., 2006). Further analysis needs to be conducted on these statistics however observation of the pattern forming in this data shows that locations with higher rates of social and low cost housing corresponds with higher rates of suicide by any comparison e.g., Post code 4816 is more than double the rate of suicide compared to the NQPHN generally, and to Queensland, and more than three times higher than the national rate.

Table 6. Suicides per 100000 in the Region centred on Townsville by Postcode (2011-2013)

Location & Postcodes	Per 100000	NQPHN per 100000	Postcode rate	RR NQPHN	RR NQPHN/ Qld	RR NQPHN/ National
Townsville						
4810[4]	55.7	17.0	18.6	1.1	1.4	1.7
4812	30.8	17.0	10.3	0.6	0.8	1.0
4814	22.5	17.0	7.5	0.4	0.5	0.7
4815[5]	48.7	17.0	16.5	1.0	1.2	1.5
4817	53.8	17.0	17.9	1.1	1.3	1.6
Townsville District						
4816[6]	104.7	17.0	34.9	2.1	2.5	3.1
4818[7]	39.4	17.0	13.1	0.8	1.0	1.2
Burdekin Region						
4807	54.1	17.0	18.0	1.1	1.3	1.6
Bowen & Proserpine[3]						
4800	92.1	17.0	30.7	1.8	2.2	2.7
4802	71.9	17.0	24.0	1.4	1.8	2.1
4805	76.3	17.0	25.4	1.5	1.9	2.3
4804						
Ingham / Cardwell District						
4849[8]		17.0				
4850	95.5	17.0	31.8	1.9	2.3	2.8
Western Districts[3]						
4820						
4821						

Note. 1. The National rate per 100000 is 11.2 and the Queensland rate is 13.7 per 100000. 2. Townville region include communities at Paluma, Nome, Palm Island. 3. No data provided for Collinsville 4804, Charters Towers 4820 or Hughenden 4821. 4. 4810 includes older inner-city suburbs of Townsville, Town Common and social housing; 5. 4815 post code areas Kelso & Lavarack. 6. Postcode 4816 includes Nome, Paluma and Palm Island. 7. Postcode 4818 includes Bluewater, Hervey's Range, Deeragun, Burdell. 8. Postcode 4849 is Cardwell and surrounds – no data provided

Rural communities in the Ingham, Bowen, Proserpine and Burdekin regions were all well above the rate per 100000 for the NQPHN as a whole, with response rates in the range from 1.6 to 2.8 times more suicides than the Australian National rates. This may be in part due to higher rates of suicide amongst agricultural workers although this remains a hypothesis at this stage. In smaller rural communities such as these it might be expected that if Cerel's equation holds true in Australia, 135 people will be affected by each suicide however, as the communities are smaller in rural communities the impact could affect a much greater proportion of residents than might be the case in larger centres such as Townsville or Cairns.

Suicide Research in Northern Australia

Males at all ages are more at risk of suicide than are females, and yet this is a group who are reluctant to participate in research associated in any way with suicide. The proportion of female to male participants in research studies over the past five years is about 70 percent on average. Male suicides in Queensland in 2014 were 76% of the total for that year. According to Australian Institute of Health and Welfare (2010), suicide is second only to coronary heart disease in the contribution to years of life lost for males. The question is why and what can be done about it? What is it about females that prevent them from suiciding at the same rate as men over three consecutive years as shown in Figure 4 for the NQPHN? There are no glib answers to these questions although there are strong and consistent findings that point to where change strategies might be targeted.

Defining Suicide Prevention

Suicide prevention seems self-evident however *Suicide Prevention* is a short label for a plethora of conceptual models and approaches. Some approaches are at the individual level, with others focus on family, organisational, local community and national approaches. In this section, the principal components of *Suicide Prevention* such as mental health and Suicide Literacy, suicide stigma and the myths about suicide, risk factors, awareness and training, post-vention, help seeking, are reviewed. What works or might work will be addressed through research findings and wherever possible will be North Queensland and Queensland specific.

Mental Health and Suicide Literacy

Mental health literacy is defined as *knowledge and beliefs about mental disorders which aid their recognition, management or preventing* (Jorm, 2012, p.231) for which there is evidence of a range of interventions that can improve mental health. It is more than knowledge alone; literacy goes a step further to the possibility of action to benefit one's own mental health or the mental health of others. In application to mental health or suicide literacy (Batterham, Calear, and Christensen, 2013) some parts are more suited to a community focus, some for those specifically affected, and includes what people affected by a mental health state and their primary support person and family need to know to empower effective support. The content of literacy includes (Jorm, 2012):

- Knowledge of how to prevent mental disorders
- Recognition of when a disorder is developing
- Knowledge of help-seeking options and treatments
- Knowledge of effective self-help strategies for mild problems
- First aid skills to support other in the development of a mental disorder or in a mental health crisis

Most importantly literacy in this context includes knowing when help is required by mental health professionals (Goldney, 2002; Jorm, 2012). In Goldney's interview study of 3010 people in a community survey of metropolitan and rural dwellers in Australia across three groups:

- Major Depression and no suicidal ideation
- Major Depression and suicidal Ideation
- Adults without either Depression or suicidal ideation

People who had prior experience of a family member were better able to recognise Depression in themselves when it happened but most across all three groups could not see it in others (i.e. in vignette characters). The only response that was significant across the three groups was that the condition was more likely to be cancer or another physical illness rather than Depression. When asked about possible sources of help there were no difference across the three groups either suggesting that even those with experience of Major Depression in treatment were no more knowledgeable than those who had no prior experience or reason to seek help. The types of help that people thought would be helpful or harmful are shown in Table 7.

Table 7. Potential helpfulness or harmfulness of assistance (Goldney [2002])

	Groups					
Type of Help	**No Depression/ suicidal ideation**	**Major Depression No suicidal Ideation**	**Major Depression with suicidal ideation**	**No differences across 3 groups**	**Harmful**	**Helpful**
Close family & friends			√			
		√				
Pharmacist			√			
Clergy, minister, priest			√			
Family Doctor						
Counsellor/social worker						
Telephone Counselling						
Psychiatrist						
Psychologist						
Naturopath/Herbalist						

Note. Colour Coding Legend

Somewhat helpful	**Very Helpful *p>.01***
No Differences *p<.05*	**Harmful**

Major Depression with suicidal ideation was significantly different from other groups on 2 harmful and helpful sources of help

Goldney argues that contact with mental health professionals does not translate into increased mental health literacy although it is clear from Table seven that friends and family are critically important as gatekeepers or perhaps *gate-openers* to enable help seeking.

More recent studies have identified the role of mental health and suicide stigma in this context and the role stigma plays in slowing or preventing help-seeking in Australia and Canada (Barney, Griffiths, Jorm & Christensen, 2006; Batterham, Calear, & Christensen, 2013; Oliffe, Hannan-Leith, Ogrodniczuk, Black, et al., 2016). Males were significantly more stigmatising than females in the Batterham study with a 43% participating rate for males, and 38% in the Barney et al., (2006) study. These are relatively high male representation for a mental health study in Australia. Oliffe's Canadian study (*N*=901) had relatively even representation from males and females. This is important given that self-stigma in males is likely to be a barrier to help-seeking when suicidal. In the Canadian suicide literacy study 56% of responses on the literacy scale were "don't know" or incorrect. Batterham's Australian study showed men to be significantly lower in suicide literacy

($p<.017$) and higher in suicide stigma ($p<.001$). As males are at much higher risk of suicide than women in Australia there is reason for concern and particularly for those working in rural and remote locations (Pierce, Little, Bennett-Levy, Isaacs et al., 2016) where the rates of suicide are higher as shown in Tables 4,5 and 6 that require customised approaches to meet community need.

Suicide Stigma in North Queensland

Suicide studies in North Queensland over the past four years have shown that while Mental Health First Aid and Community Response to Eliminating Suicide (CORES) training are responding to the need to increase mental health and suicide literacy. The stigma and belief in the myths of suicide remains resistant to change.

Across studies over the past four years involving 1500 North Queensland community members and students, suicide stigma and belief in the myths of suicide have been found repeatedly. These studies support the studies of Batterham et al., and Oliffe, et al. that males, particularly young males who are higher in suicide risk are also lowest in suicide literacy (Buckby, Lutkin & Crothers, 2015; Stodden & Buckby, 2013; Laing & Buckby, 2013). Older people in the NQ studies tended to be lower on stigma as Batterham et al., (2013) also found. There was statistical evidence that suicide risk awareness is lower in the presence of stigmatising attitudes about suicide (Stodden & Buckby, 2013). Experience in working with suicidal people increases suicide literacy and the majority were university graduates or with lengthy experience in the workplace (Buckby, Lutkin, & Crothers, 2015; Laing & Buckby, 2013; Hirvonen, Buckby & Nelson 2014). It was also found that suicide risk awareness was greater for females who were more empathic than were males in a study conducted primarily in rural/remote areas rather than in regional centres (Buckby, Lutkin & Crothers, 2015). Nevertheless (Hirvonen, Buckby & Nelson, 2014) found that on three factors of stigma (Stigma, Isolation, Glorification) that Mental Health Workers, and Students studying mental health were better at recognising negative Stigma *e.g. cowardly*, but no different from the general community in recognising stigma factors of Isolation e.g. *lost,* or Glorification e.g. *brave.* Empathy makes a difference as it sensitises individuals to Stigma and to Isolation aspects of suicidality (Buckby, Lutkin & Crothers, 2015). Whereas religiosity,as well as stigma, was found to reduce awareness of suicide risk in a cross cultural study of Australia and Brazil (Peel & Buckby, 2015). It should also be noted that Australia is much lower on the religiosity scale than is Brazil and is therefore less likely to have influence here (WIN-Gallop International, 2012).

Although suicide stigma is generally high amongst younger men, there was no evidence to support the hypothesis that stigma amongst men in rural and remote communities is higher than men living in regional towns or metropolitan areas (Batterham, et al., 2013; Buckby, Lutkin, & Crothers, 2015). One probable difference between rural and remote men and those from rural and outer-regional areas in the north suggests that male stoicism and shame in adversities such as drought, and financial stress affects self-worth, and contributes to poorer health and unwillingness to seek help for physical and mental health (Alston, 2012; Alston & Kent, 2008, Bryant & Garnham, 2014; Lutkin & Helmes, 2011).

The Myths of suicide are just that, folklore of suicide that are not substantiated by evidence but are resistant to change. There are six core myths according to the World Health Organisation (2014) that do not stand up to evidence (Table 8).

Table 8. WHO suicide myths that are not supported by evidence.

World Health Organisation – Suicide Myths	The Facts about suicide
People who talk about suicide do not mean to do it	People who talk about suicide may be reaching out for help or support. A significant number of people contemplating suicide are experiencing anxiety, depression and hopelessness and may feel that there is no other option
Once someone is suicidal he or she will always remain suicidal	Heightened suicide risk is often short term and situation specific. While suicidal thoughts may return, they are not permanent and attempts can go on to live a long life.
Talking about suicide is a bad idea and can be interpreted as encouragement	Given the widespread stigma around suicide, most people who are contemplating suicide do not know who to speak to. Rather than encouraging suicidal behaviour, talking openly can give an individual other options or the time to rethink his/her decision, thereby preventing suicide.
Only people with mental disorders are suicidal	Suicidal behaviour indicates deep unhappiness but not necessarily mental disorder. Many people living with mental disorders are not affected by suicidal behaviour, and not all people who take their own lives have a mental disorder.
Most suicides happen suddenly without warning	The majority of suicides have been preceded by warning signs, whether verbal or behavioural. Of course there are some suicides that occur without warning. But it is important to understand what the warning signs are and look out for them.

Note: WHO myths can be accessed at:
http://www.who.int/mental_health/suicide-prevention/myths.pdf

There are other myths in addition to those in Table 8 which have been used in studies in the USA as well as in North Queensland. In daily life belief in myths and stigma function in the same way by creating risk blindness in people who are suicidal (Laing & Buckby, 2013; Stodden & Buckby, 2013).

At the national level it is encouraging that mental health literacy in the community increased from 2007 to 2011. However, stigma remains significantly stronger than desirable as there was an increase in community beliefs that people with a mental health issue are dangerous and unpredictable, that most other people would not tell anyone about it, and the firm belief that most other people would not employ someone with the problem (Reavley, & Jorm, 2011). Since this national mental health report in 2011 the situation does not seem to have changed.

A second study conducted in Europe compared mental health professionals with a minimum two years of experience versus first year medical students without any mental health training or professional practice. Explicit stigma that allows people to express attitudes and discriminatory behaviour towards people including suicidal people with mental health issues was significantly lower for mental health professionals compared to the no experience group. In the context of work training, ethical codes of practice, and professional values and behaviour towards mental health care are overlearned, readily espoused, and to be expected as the studies in North Queensland have found repeatedly. However, implicit stigma differs and the methods of measurement which take away conscious control of judgement i.e. the rules that apply in the conduct of professional practice, cannot be relied upon. In the European study mental health professionals and first year medical students who were in pre-practice education were no different on implicit or out of conscious control stigma (Kopera, Suszel, Bonar, Myszka, et al., 2015). This study serves as a warning that knowing or learning about and increasing knowledge of suicide and mental health might not translate to behaviour outside the professional practice context, or within the work context where professional and/or organisational constraints apply (Buckby & Gordon, 2015; Turner, Higginson, Osborne, Thomas et al., 1982). [Explanatory note 3, Appendix E]

Knowing about versus knowing how

Knowledge gained from Professional training and "doing practice" with suicidal patients and clients was at the core of one small qualitative study that found practitioners from different professional training all drew significantly on tacit knowledge (the "know how") that expands and deepens understanding of suicidal patients/clients rather than on formal learning and training (Pettman & Buckby, 2015). Tacit knowledge can be impeded through organisational arrangements and settings (Turner, et al., 1982), and liberated in liminal spaces such as lunch rooms, and corridors where knowledge is openly shared and acquired across professional boundaries and skill levels (Perrott, 2013). This is one aspect of learning that might adapt to suicide prevention through creative planning to deepen community understanding.

The lived experience of rural and remote women in North Queensland

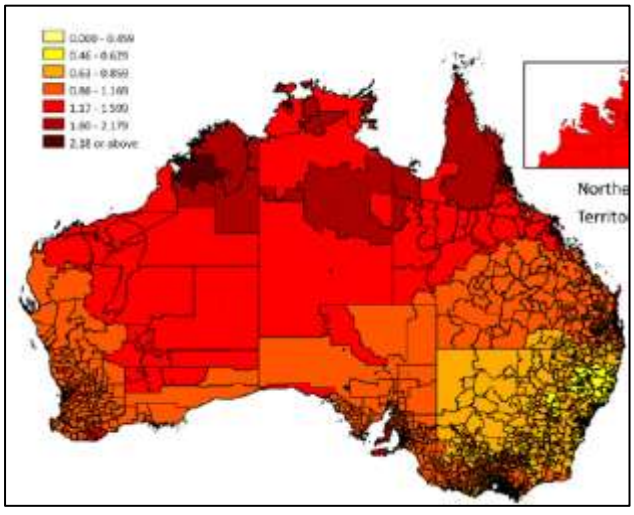
Attitudes to suicide was investigated qualitatively with a small cohort of Aboriginal and non-Indigenous women (Stodden, Lutkin & Buckby, 2016). The women who volunteered had all had personal experience or multiple experiences of suicide by people close to them. The women's identity was not known to other participants in the study.

Independently of each other the women described suicide as a journey that escalated in lethality towards an end point and encompassed the experience of *tunnel vision,* described as a limited

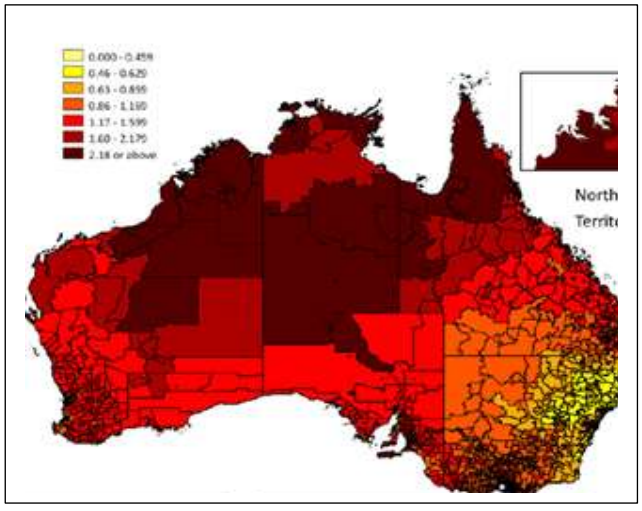
focused mindset that impaired one's ability to perceive *reasons for living.* The women revealed their expectations that suicidal people should be able to cope independently and seek help if they needed it. In their personal observations about suicide they also believed that indications of low suicide risk were *reasons for living (*such as good job, good partner, and a young child). The similarities of the women's accounts were mirrored in the similarity of their reasoning, interpretations and meaning of suicidal behaviour. Cultural differences were relatively few although significant. Cultural and spiritual beliefs involved differences in behavioural signs of risk, shame, and external influences such as supernatural beliefs. Appendix B includes further descriptors of the suicide journey. As can be seen from participant's words, suicide stigma and belief in myths is evident in their understanding of suicide even after living through the experience of close others dying. Multiple theories of suicide were identified in the implicit suicide theories of the women and captured by their suicide narratives. The mapping suggests that theories of suicide emerge at different points along the trajectory toward the final event although at this stage needs further investigation.

Suicide clusters and contagion

Suicide clusters and contagion are frequently discussed in the literature although there is no clear description or definitions of these terms, and the studies included under these labels lack rigour and seem to measure different things in different ways (Hanssens, 2007; Haw, Hawton, Niedzwiedz, & Platt, 2013; Joiner, 1999; Neidzwiedz, C., Haw, C., Hawton, D., & Platt, S. 2014). Cheung, Spittal, Pirkis & Yip, (2012) [Maps 3 and 4] provided a spatial analysis of suicide by postcode that provides a clear picture of the areas of greatest mortality across the continent for males and females. The scale of male suicides is immediately obvious in the spatial clusters of high risk postal code areas, low socio-economic status, low access to mental health and higher risk for Aboriginal and/or Torres Strait Islander Australians explain these statistics to a large degree, and clearly show rural and remote Aboriginal and/or Torres Strait Islander locations are the highest risk of suicide in the NQPHN areas of responsibility.



Map 3. Female suicides by postal areas 2004-08



Map 4. Male suicides by postal areas 2004-08

While there are multiple cluster analyses of statistical data in the literature there is very little on what to do about it. What is common across all such studies is that clusters are young (Range 15-34), Indigenous, and most likely live in Northern Territory, Queensland (particularly NW Qld; Xin Qi et al., 2012), Western Australia, and South Australia, are in rural and remote areas, and within a cluster

territory (Cheung, et al., 2012), and are of lower socio-economic status (Cheung, Spittal, Williamson, Tung & Pirkis, 2014; Xin Qi, Wenbiao Hu, Page, & Shilu Tong, 2012). The data for these studies provide a snapshot from years 1999 to 2008. The spatial maps show clear male vs female statistics as the previous tables in this report have shown.

Contextual factors in suicide clusters suggested by the Promote Life Model (Hanssens, 2010) provides a basis for prevention targets that could apply for all Indigenous and for most non-Indigenous, particularly the young. As Figure 4 shows the model is multi-level and person-focused.

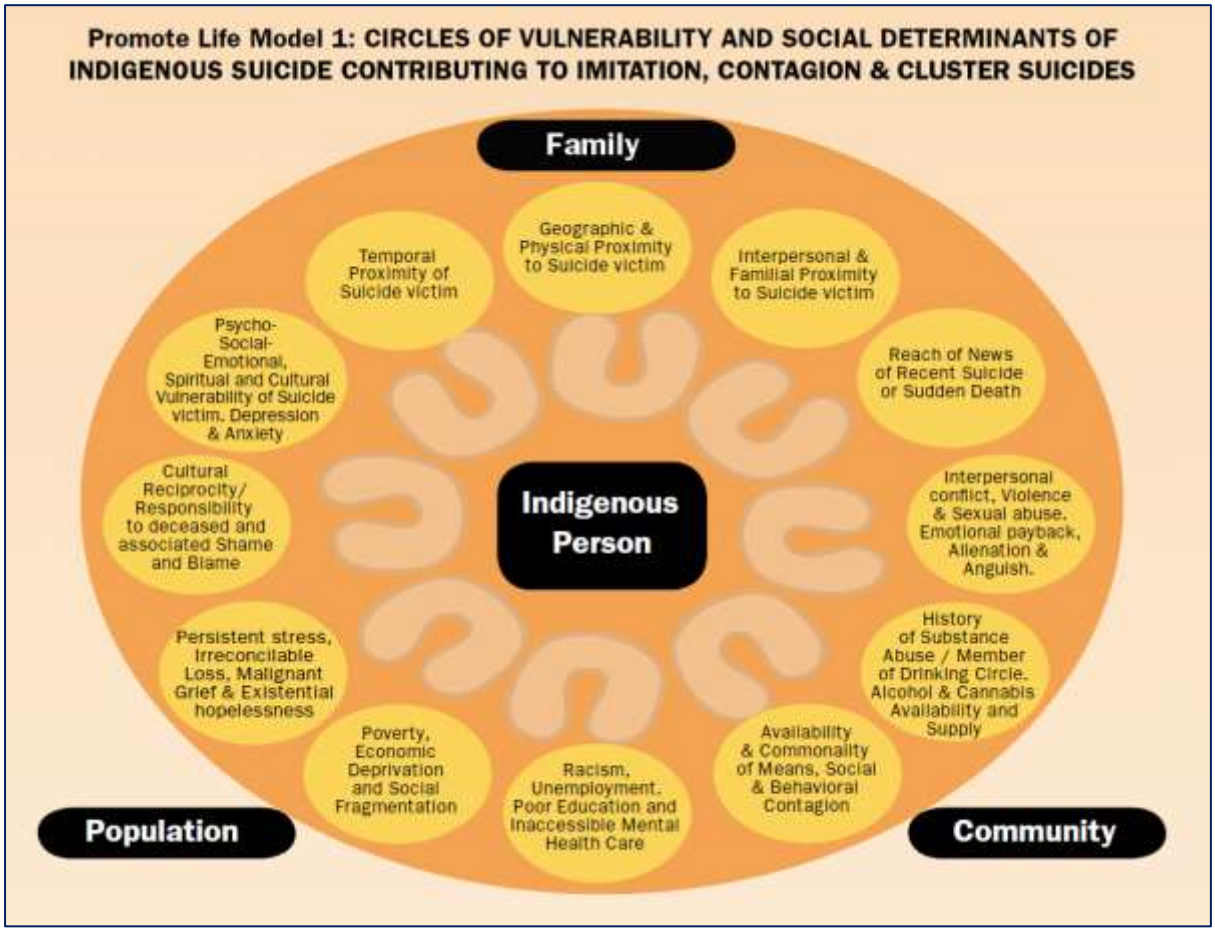


Figure 4. Circles of vulnerability and social determinants of Suicide (Hanssens, 2011)

Early research into suicide clusters at the time of the Black Deaths in Custody Inquiry (Reser, 1989) was able to show that there was evidence of clustering in small geographic areas over short time frames (e.g., 10 weeks, p. 330), by people known to each other and with prior knowledge of the suicides. At that time there was no evidence of similar clustering amongst non-Aboriginal people in North Queensland. A systematic examination of suicides in Indigenous communities in Queensland (Hunter, Reser, Baird, & Reser, P., 1999) found, as more recent studies do, that Aboriginal suicides are commonly young men, are associated with alcohol and substance abuse, and often preceded by interpersonal conflicts and in families where suicide had previously occurred. The following quote from the Hunter et al report is particularly relevant to suicide prevention:

What is critical from a preventative perspective is to appreciate that it is the sense making and construction of others that can create and constitute further risk. This underscores the critical importance of community and media accounts and explanations (p. ix).

In essence this means that people apply their own stigmatising view of self and others, assumptions, reasoning and, make sense of, or come up with personal explanations about why the person suicided. Hunter et al., say that the process of making sense can lead to (potentially) increased risk for some people as the following study with former high school students also suggests.

There are no identifiable studies of suicide clusters and contagion in the research literature for non-Indigenous Australians however research has been conducted in the USA (Abbott & Zakriski, 2014). In this study of a large class of high school graduates (423), 152 participated and 85 had been exposed to multiple suicides during their high school years (average of 3.4 per student). The suicides had persisted over the period of enrolment and 90% of students participating in the study were Caucasian. Former students who dropped out of the study had recorded higher current grief even though the deaths had occurred at two to seven years previously. Grief and closeness to the person who had died did not differ from whether a former student had lost two or three peers to suicide. Of the number of peers lost to suicide and closeness to the person who had died, closeness to the peer lost was more important than the number of deaths there had been. This group also believed in the myths of suicide[6] (e.g., suicide is not preventable, if people want to die we can't stop them) and found the death incomprehensible, and also believed that suicide is 'a right.'

Some former students who had been close to a student who died did not do well, particularly those with present grief (i.e., prolonged grief), while others were more resilient. Closeness and grief also weakened beliefs in preventability of suicide. Social support was important and functioned to reduce grief and suicide attitudes, but not eliminate them. However, social support also served to maintain stigmatising attitudes (e.g., suicide is selfish, an act done in anger, or revenge). Peers who had not been exposed to suicide tended to maintain normalising beliefs about suicide and found it incomprehensible. Present and past grief persisted for the former students who had been exposed to the death of a peer, and for people who had multiple losses to suicide. Stigmatising beliefs about suicide persisted amongst the former students most affected as Bartik, et al., (2015) also found. It is possible that believing suicide is not preventable is a coping strategy to manage guilt and self-blame that often emerges post-suicide of a close other. Such a reaction could also be a sign of deepening depression and hopelessness (risk factors for suicide) and *might* suggest a mechanism by which contagion occurs.

Former students with social support (family, special friend) were more likely to think suicide is preventable, and less likely to think that suicidal people will not talk about it or make threats to suicide (Abbott & Zacriski, 2014). Whether similar findings would be made in the Australian context is yet to be tested.

Help Seeking

From a bystander stance It is hard to comprehend why people in suicidal despair do not ask for help. Males more than females in rural areas are less likely to access professional help when suicidal compared to urban dwellers (Caldwell, Jorm & Dear, 2004; Price & Dalgleish, 2013). Young people and Aboriginal youth in particular are less likely than others to get help (Price & Dalgleish, 2013; Rickwood, Deane & Wilson, 2007). Recently a qualitative study of men found they were not self-aware, misinterpreted mood disturbances, and did not associate acting out behaviours with increasing suicidal risk (Player et al., 2015). To ask for help, one first needs to recognise it is required.

[6] Myths about Suicide (Joiner, 2010) Appendix C

De Leo, Cerin, Spathonis and Burgis (2005) found 42% sought help but most of those (39.4%) did not have ongoing support after the initial crisis. Aboriginal and Torres Strait Islander people are three times more likely to suicide and less likely to seek help compared to other Australians (Sveticic, et al., 2012) (Explanatory Note 2, Ap. E). Suicide stigma and risk blindness seems to be a major barrier.

Table 9. Barriers to Help-seeking

Source	Barriers	Aboriginal & Torres Strait Islanders	Other Australians
	ADULTS		
Curtis, 2010; Eagles et al., 2003	Stigma	√	√
Alston, 2012; Alston & Kenny, 2008; Player et al., 2015	Male stoicism & Pride	√	Rural & Remote men
Bryant & Garnham, 2015; Lutkin & Helmes, 2011	Shame / self-worth	?	Farmers √
De Leo et al., 2005; Lutkin & Helmes, 2011	Don't feel the need to	?	√
	Don't want to trouble others	?	√
	Not confident in the help available	?	√
	Concern about what others will think /self-stigma	?	√
	Don't know where to go	?	√
	Concerned about cost	?	√
Player et al., 2015 p. 6	Denial or misinterpretation of disturbed mood Misunderstanding the link between externalising behaviour, mood and increasing risk	Probably	√
Chalmers et al.,2014; Isaacs et al., 2010 Lutkin & Helmes, 2011	Racism	√	
	Discrimination	√	
	Lack of availability or trust in mainstream health professionals & services	√	Rural & Remote older adults √
	Misconceptions due to cultural and language barriers	√	
Roe, 2010; Vicary & Westerman, 2004	Traditional beliefs (mental health) manifesting spiritually & culturally	√	
	ADOLESCENTS		
Bartik, et al., 2015; Boyd et al., 2008; Price & Dalgleish et al.2013; Quine et al., 2003	Stigma	√	√
	Cost	?	√
	Limited Choices / anonymity	?	√
	Lengthy waiting period	?	√
Price & Dalgleish, 2013	Shame, fear, inter-generational stigma, low awareness of suicide.	√	
Roe, 2010; Vicary & Westerman, 2004	Traditional beliefs (mental health manifesting spiritually & culturally)	√	

Note. Categories of barriers for Aboriginal and Torres Strait Islanders vs Other Australians are not absolute and might be equally applicable in most cases.

Acceptable sources of help-seeking particularly for adolescents are turning to friends and seeking support at school (Boyd, et al., 2008; Price & Dalgleish, 2013; Quine et al., 2003). This suggests that

role of peers in suicide prevention is a front-line of defence[7]. The use of online help-seeking has changed the way people seek help particularly young people and it has been found that on-line rather than face-to-face help is preferred less for more at risk individuals, whereas there is no difference for on-line help-seekers from low to high risk categories (Seward & Harris, 2016)

Help offering

Before help is offered, it must first be recognised as a need. Turning to friends in the peer group is ideally part of a stepped process into professional help if the risk is significant, whereas in a study of adolescents' responses to peers with depression and conduct disorder (acting out behaviour) it was found that while 53% described providing positive social support they had no intention to take further action increasing the potential ripple effect described in Maple et al., (2016) and in Haw et al., (2013). In the adolescent peers study another 23% said they would at least tell an adult, although females were far more likely to do so than male peers who mostly said they would do nothing (Kelly, Jorm & Rodgers, 2006).

There are very few studies that have taken an interest in help offering as opposed to help-seeking and it seems based on the assumption that suicidality will be obvious to an observer as will what to do about it in the event that it occurs. This is simply not the case. In evaluation of gate-keeper training for Aboriginal communities, knowledge about suicide increased, and participants had more confidence in identifying suicidal signs in others. Most importantly the intentions to provide help in such circumstances also increased in combination with the lived experience of relevant cultural beliefs and socio-cultural systems of care (Capp, Deane, & Lambert, 2001; Goldston, Molock, Whitbeck, Murakami et al., 2008[7]). More recently a qualitative study of men found they were not self-aware and misinterpreted mood disturbances and acting out behaviours as signs of increasing suicidal risk (Player et al., 2015). The consequence of misinterpretation limits the likelihood of help offering. To ask for help, one first needs to recognise it in oneself, and close others also need to be sensitised to the increasing risk.

As evidence of how low recognition could be amongst peers, King, Vidourek, and Strader (2008) found that 11% of university students 'strongly believed' they could recognise if a friend was suicidal, and 17% believed they could ask someone if they were suicidal, students who had some education about suicide or personal experience with family or friend were more confident in recognising risk, but 71% of the participants had no idea what on-campus services were available to students even if help was offered.

The gap between expecting on-lookers to know what to do in such circumstances and the reality was in stark contrast in surveys and a small qualitative study of North Queensland women (Laing & Buckby, 2013; Stodden & Buckby, 2013, Stodden & Buckby, 2015). Interpersonal needs awareness and (low) stigma predicted suicide risk awareness in the studies. The surveys also found that being female and having had some personal exposure to suicide risk meant less stigmatising beliefs than males in particular.

When applied to Aboriginal and non-Aboriginal woman from the community in a qualitative study help offering, defined as an approach behaviour to the potentially suicidal person to supportively

[7] See also Goldston et al., 2008, p. 19, 21, 23, 24

listen and talk to them by showing empathy and possibly in a solution-focused discussion was illustrated by Charmaine and Nola in the following comments:

"*Once they've shared like that, every now and then I'll say "are you okay? How are you going?"… I just check on 'em… try to make them laugh, get them talking… cos they need someone listening… but not just oh, we love you, don't do it… get them talking - why you feeling like that? What's happened? What's going on?*" – Charmaine.

"*Sit down and have a good yarn with him and ask him, you know, why you doing this? What, you're sick of living? You know, there's always a place with us*" – Nola.

The women also illustrated the need to understand suicide in order to encourage people to seek help. "*To help someone you've really got to understand it [suicide], and I think a lot of them don't understand it… but I believe it's everybody's responsibility. If you know someone's suicidal, you should try and get them the help they need... I do know from experience that if they think you understand it, they will come to you. If anything it encourages your kids to talk up*" – Vivienne.

However, the women showed that while they were sensitised to suicide due to personal experience they could hold two psychologically opposed cognitions (ideas, beliefs, opinions). While participants' had reasonable understanding of the suicidal person's internal thoughts that they were *incapable of coping, help seeking and, seeing positive aspects of life*. The women in the study also showed conflicting attitudes with their assumptions that an at-risk-person is also capable of coping and seeking help independently. This was combined with the perception that if a suicidal person has reasons for living they are not likely to die by suiciding which was untrue of the participant's lived experiences of their own families. Such conflicting beliefs are particularly concerning for suicide prevention efforts as suicide stigma that underpins suicide risk blindness might cause people to over-estimate the coping ability of suicidal people, particularly those who have "reasons for living." As this example from Nola shows:

"It's sad because you know, you see nothing wrong with them… so why did they go and hang themselves... one girl who hung herself here, and you know she had everything - she got married, she had a young baby here in town, she had a nice husband, she had a good job, she was manager of a lot of things here in town…but she just went out the back, just took her life… It's terrible that they wanna take their life for nothing... especially, you know, when they got a lot to live for".

There remains much more to know about how to overcome the effects of stigma on suicide risk awareness, as well as what to do to support help-seeking and help-offering in the Suicide Prevention space. What this section on help-seeking and help-offering shows is that suicide is "everybody's business" which in effect means, siblings, partners, friends, extended family, school and work contexts, sports and social organisations, whole community approaches, as well as national strategies.

Signs of Suicide Risk (see also Appendix D)

There are multiple theories of suicide that all contribute something to understanding how thoughts about suicide progress to enacting the thoughts with suicidal intent. Several elements have to be present, the thoughts and feelings about suicide and one's own worth, the desire and intent to take action, and the means to follow through with the action. This phase can be relatively short or long.

The Interpersonal Theory of Suicide

Suicidal behaviour is a major problem worldwide and unacceptably high in Australia. There is a relative lack of theoretical development and empirical attention to explaining suicidal behaviour. The Interpersonal Theory of Suicidal Behaviour (IPTS) (Joiner, 2005) sets out to at least partially fill the gap. The IPTS propose that the most potent form of suicidal desire is caused by the simultaneous presence of two interpersonal constructs—thwarted belongingness and perceived burdensomeness, which encompasses hopelessness and that the capability to engage in suicidal behaviour is separate from the desire to die. In this theory, the capability[8] for suicidal behaviour arises out of habituation (frequency of getting hurt in sport, street fights, and dangerous pass-times) and related processes that lead to fearlessness, in response to repeated exposure to physically painful and/or fear inducing experiences, such as body contact sports, and "thrill seeking" experiences e.g., para gliding, or interpersonal violence. The inter-relationships of the three components of IPTS as shown in Figure 5 showing the location of highest predicted risk (Van Orden, Witte, Cukrowicz, Braithwaite, et al., 2010). This theory underpinned the research studies conducted by Laing and Buckby (2013), Buckby, Lutkin, and Crothers, (2015), Stodden and Buckby, (2013 and 2016) and seems likely to be explanatory for Indigenous and non-Indigenous suicides.

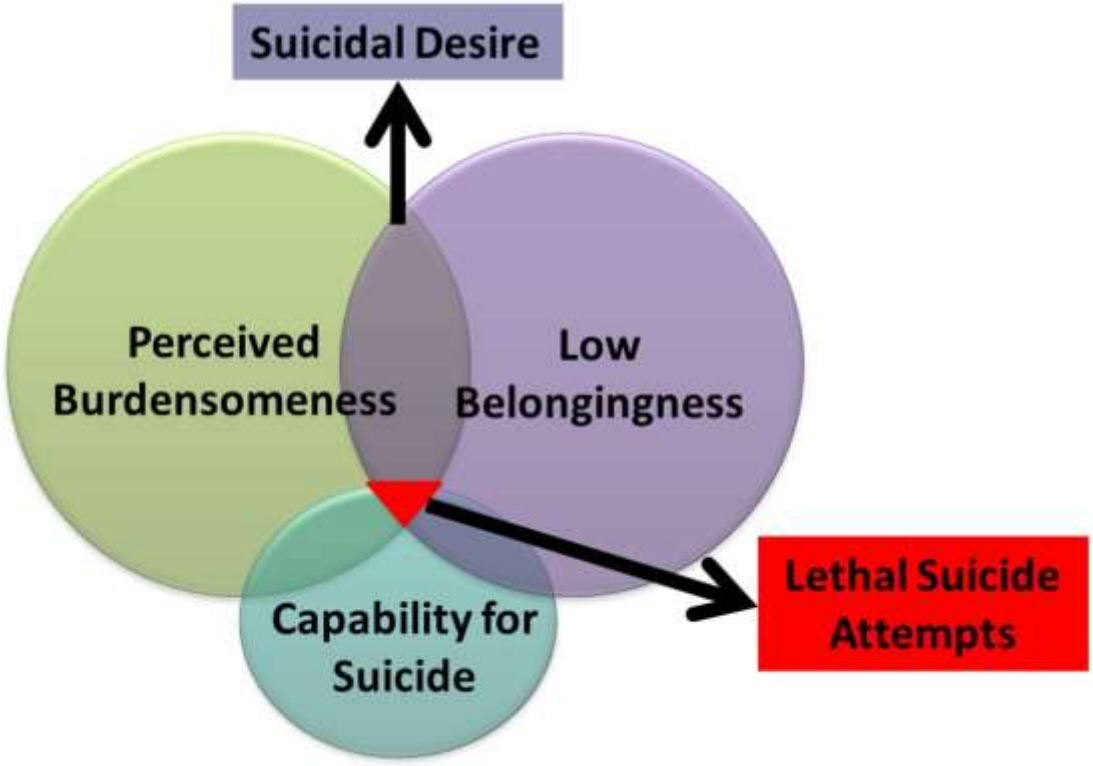


Figure 5. The Interpersonal Theory of Suicide (Joiner, 2005; Van Orden et al., 2010)

There are numerous variables that predict suicide – and it is growing. The following mnemonic provides a memory aid for a brief assessment of proximal risk through warning signs to inform what happens next. It should not be used as a proxy for a detailed risk assessment. It should be noted

[8] Capability is based on opponent-process theory: After repeated exposures to an affective stimulus, the reaction shifts over time so that the stimulus stops eliciting the original response and the opposite response is strengthened (Solomon, 1980).

however, that distal risk factors that increase risk do not inform us who will attempt or eventually die through lethal self-harm. Even at the medium to high risk people continue to live and breathe and can continue for years in a state of risk. Distal risk factors are the unchangeable facts of a person's history such as chronic illness or disability, repeated exposure to violence in the family or personally through childhood that create a persistent state of vulnerability as the Promote Life Model shows (Fig. 4 "Circles of vulnerability" p. 17). Aboriginal definitions of suicidal behaviour (Farrelly & Francis, 2009) are also reflected in the following warning signs except for "hanging around certain places within the community" p. 184.

IS BATH WARM?

Table 10. Warning signs of suicide (Joiner et al., 2009)

'IS BATH WARM'	
I	is for IDEATION (persistent suicidal thoughts)
S	Is for SUBSTANCE ABUSE
B	Is for BURDENSOMENESS /PURPOSELESSNESS
A	Is for ANXIETY AND AGITATION
T	Is for "TRAPPED"
H	Is for HOPELESSNESS
W	Is for WITHDRAWAL
A	Is for ANGER
R	Is for RECKLESSNESS
M	Is for MOOD fluctuation

Note: **Modified slightly by Beryl Buckby in 2016**

The role of powerlessness in suicide risk is not clear and relatively rarely researched in mental health literature. However, the sociocultural perspective provides sound reasoning about why powerlessness should be more central to understanding suicide in disadvantaged communities, minority communities, Australian Aboriginal and Torres Strait Islander communities and particularly for adolescents where connectedness and family responsibilities are paramount (Cox, 2010; Gulbas, Hausmann-Stabile, De Luca, Tyler, & Zayas, 2015; Ross, 2011; Ross, Mirowsky, & Pribesh, 2001; Tighe, McKay & Maple, 2015; Wenz, 1977).

Ross' theory of trust argues that mistrust develops with exposure to uncontrollable, negative conditions such as economic and social disadvantage, where danger and threat are pervasive in the community where one lives. Such disorder which is common in disadvantaged neighbourhoods everywhere influences mistrust directly and indirectly by creating perceptions of powerlessness and amplifying mistrust. Under such circumstances the sense of personal control is eroded and the associated distress increases anxiety, pervasive grief, anger and depression. In these circumstances a culturally informed or transformed reinstatement of personal powerfulness might be to threaten

suicide (Cox, 2010; Tighe, et al., 2015). Cox argues that where a "relational view of persons holds sway, the individualistic practice of psychiatric and other helping professions is a problem" p.241. The relational view of suicide outlined by Cox is a major consideration for planning the work of the Townsville Suicide Prevention Network given the regional rates of suicide provided by the NQPHN set out in Table 6.

Suicide Prevention

Suicide Prevention is an aspirational goal to reduce deaths by suicide and are the hardest interventions to evaluate. It was clear from the survey (Buckby & Mercurio, 2016) that "suicide prevention" means very different things to the people who participated in the survey. A clear understanding of what the systems and strategies might be that are achievable in the TSPN plan will be greatly assisted by the clear roadmap provided by the recent developments in the systems approach. Clifford et al., (2013) in a systematic review across 17 databases and 13 websites for the period 1981-2012 found three of only nine evaluations were able to show positive change following a suicide prevention intervention considerably less than desirable. The value of evaluation should not be underestimated as effectiveness is often the major criteria for success and potential recurrent funding. A statistical method of assessment was used (Krysinska et al., 2016) to estimate population prevention fractions to define the best strategies for reducing the suicide rate in Australia using the systems approach as it has done in Europe (Hergerl et al., 2013). The study found that there was insufficient evidence yet for some strategies (listed following) to assess the impact on either suicide attempts or deaths and concluded that the greatest impact is more likely to be found for psychosocial treatment, general practitioner training, and reducing access to means, although it is still very early days of the systems approach in Australia.

Table 11. Strategies in the Systems Approach

Systems Approach to Suicide Prevention	
1	**Reducing access to suicide means**
2	**Media guidelines**
3	**Public Health campaigns**
4	**Gatekeeper programmes**
5	**School Programmes**
6	**General Practitioner training**
7	**Psychotherapy**
8	**Co-ordinator/assertive aftercare**
9	**Front-line staff training**

Suicide in Aboriginal and Torres Strait Islander communities and towns are likely to benefit similarly as the systems model compares well with the "Promote Life Model" (p. 17). Recommendations made by Silburn, et al., (2014, p.153) for preventing suicide among Aboriginal Australians will should be considered in the TSPN Planning.

Table 12. Aboriginal community factors in suicide

Aboriginal Community Factors
Lack of sense of purpose in life
Lack of recognised role models and mentors outside of the context of sport
Disintegration of the family
Lack of meaningful support networks within the community
High community rates of sexual assault and drug and alcohol misuse
Animosity and jealousy manifested in factionalism
The persistent cycle of grief due to the high number of deaths within communities
Poor literacy levels leading to social and economic exclusion and alienation

Note. Information from Silburn, Robinson, Leckning, Henry Cox & Kickertt (2014) p. 153

The systems approach is multisectorial and designed to be tailored to suit the community in which it is delivered and requires "buy in" from the community to be successful (National Suicide Prevention Summit 2015, p. 5). Not all strategies will be equally effective and some fit earlier on a prevention time-line than others. Prioritisation of strategies will depend on many local-level factors, such as existing services and suicide prevention initiatives already implemented as well as gaps identified through an audit of services and programs to define gaps to target and avoid replication.

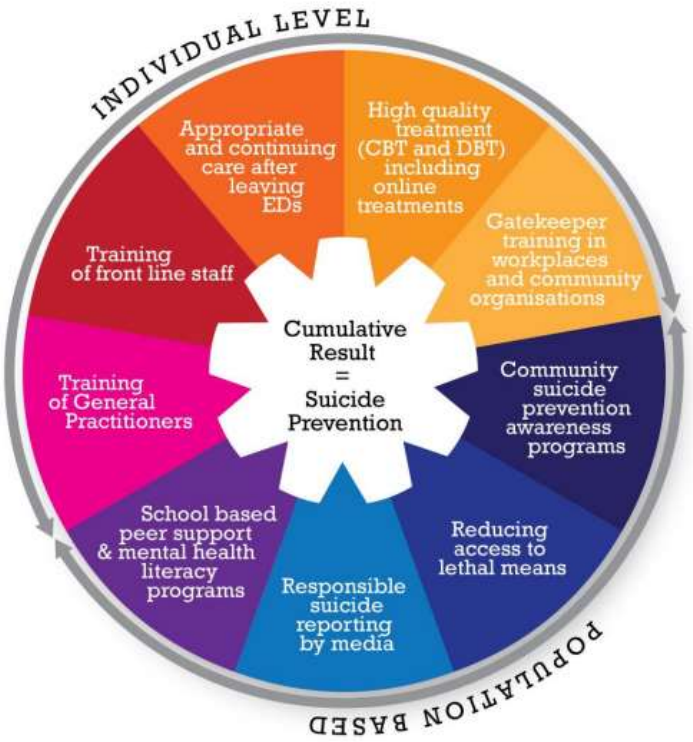
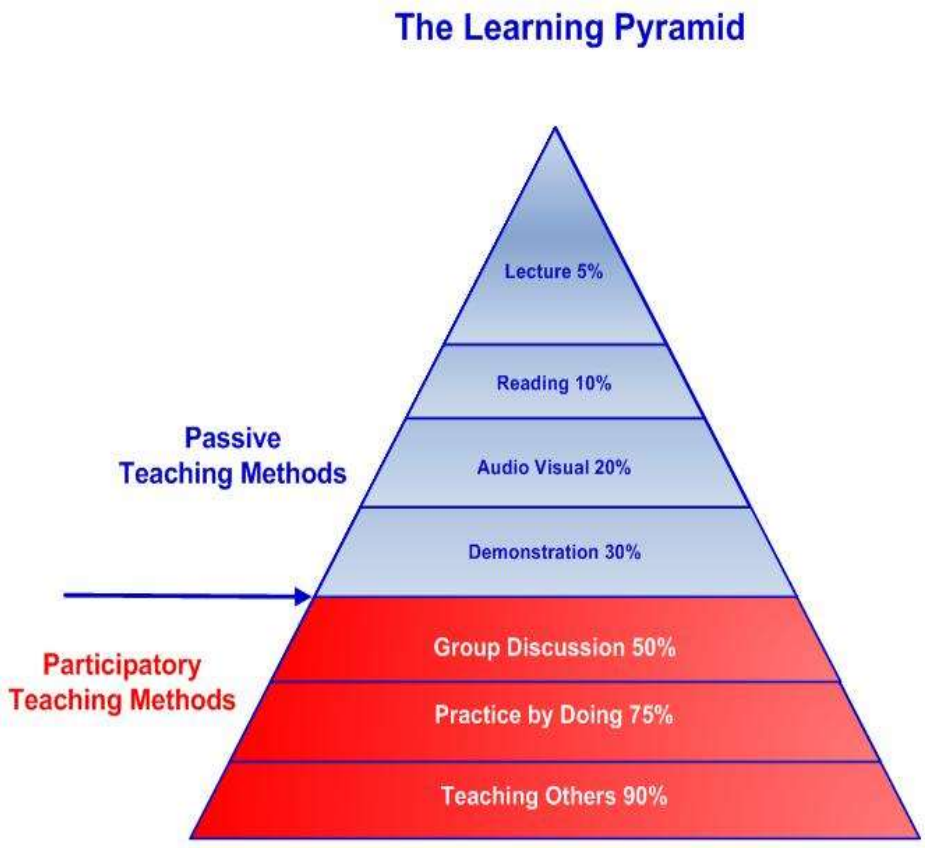


Figure 6. The multi-sectorial systems approach to Suicide Prevention

The systems approach has four core features:

1. It is multisectorial with involvement by all government, non-government, health, business, education, research, and community agencies and organisations
2. Operates within a localised area
3. Implements evidence based strategies
4. Demonstrates sustainability and long-term commitment

The evidence of effectiveness is weakest for community awareness programs which should be delivered in parallel with other interventions, rather than a stand-alone prevention activity. One reason for that weakness is the reliance on passive learning, mostly in lecture style delivery. This can be understood within a pedagogical model of learning that scales learning strategies for retention of information. As Figure 6 shows the strongest learning retention occurs with participatory methods shown in the red bands. This is worth consideration in the TSPN planning process.



CONCLUDING COMMENTS: INTEGRATING NGOs AND COMMUNITY GROUPS

The goal for a systems approach is that strategies are introduced and implemented in each local area with local resources simultaneously demonstrating sustainability and long-term commitment. Gaps in service provision will serve as basis for advocating for, or creating, system changes that will bring the community into alignment with best practice. There may be opportunities for organisations such as the TSPN to change programs and mindsets, minimise effort and duplication while maximising impact.

There is an important role for developing and valuing the tacit knowledge and wisdom of the lived experience of suicide that can be made explicit to the TSPN and inform the work of the group. This is a growing trend within the broader suicide prevention conversation and embedded in Western Australia's Mental Health Commission, *Suicide Prevention 2020: together we can save lives*, the *Queensland Suicide Prevention Action Plan 2015-2017*, the *LIFE framework*, and the *Black Dog systems approach to be rolled out in NSW* (web links follow the reference list). The lived experience of people who might not have any close experience of suicide could also provide greater insight into how to communicate effectively about suicide. However, extreme caution should be taken due to increased risk of suicide and prolonged grief in adults bereaved through suicide (Klingspon et al., 2015; Pitman et al., 2016). So far there is limited research evidence for lived-experience prevention.

Inclusion of people from diverse background (Table 13) who know the community at grass roots level are likely to open opportunities to identify niches of need amongst high risk groups commonly overlooked in the larger systems of health and primary care. Engagement with the broader community by seeking out opportunities e.g., to send a guest speaker to talk to clubs or service organisations, or professional development days, in short sharp "plain language conversations" rather than major events, could productively capture individuals not encountered at major sporting or suicide awareness campaigns. The "tea and talk" rather than "chalk and talk" approach might resonate much more strongly with e.g., Aboriginal and Torres Strait Islander people, and older people living in retirement communities particularly for the skill of "help-offering".

Table 13. TSPN Inclusion and Diversity in Suicide Prevention

TSPN Inclusion and Diversity in Suicide Prevention
Aboriginal and Torres Strait Islander peoples and organisations
Post retirement aged men (in particular as they are at much higher risk)
Rural and remote communities in the region centred around Townsville
LGBTI individuals and groups
Organisation for, and people with disabilities
People from Non-English Speaking Backgrounds (Migrants/Refugees etc.)
People living with chronic conditions
Homeless people

Note. These are higher risk groups that are reported in the research literature

Finally, attention to how communication about suicide and suicide prevention should be part of the TSPN planning process. Communicating "cleanly" so that others receive the message sent unambiguously is an ability that starts with awareness of one's own style and the willingness to change if required. Communication Accommodation Theory (Giles, Coupland, & Coupland, 1991) explains how everyone uses language and communication behaviours to negotiate interactions (verbal and non-verbal). This is a bi-directional process that is influenced by motivation to (or not to) adapt accustomed strategies to meet some desired outcome which can be challenging when dealing with stigma and stereotypes about suicidal people. Learning how to adapt to the other person's communication characteristics (convergence) helps to reduce the social differences. The skills of "convergence" and "accommodation" which is a skill to promote cooperation are excellent skills to "cut through" and connect with an audience; this could be a life-saving skill under some circumstances, and could be particularly important in knowing and applying skills in how to offer help and "be heard".

References

Abbott, C.H., Zakriski, A.L. (2014). Grief and attitudes toward suicide in peer affected by a cluster of suicides as adolescents. *Suicide and Life-Threatening Behavior, 44*(6) doi: 10.1111/sltb.12100

Alston, M. (2012). Rural male suicide in Australia. *Social Science & Medicine, 74,* 414-212 doi:10.1016/jsocscimed.2010.04.036

Alston, M., & Kent, J. (2008). The Big Dry: the link between rural masculinities and poor health outcomes for farming men. *Journal of Sociology, 44*(2). 133-147 doi: 10.177/1440783308089166

Anderson, K., Hawgood, J., Klieve, H., Kolves, K., De Leo, D. (2010). Suicide in selected occupations in Queensland, evidence from the State suicide register. *Australian and New Zealand Journal of Psychiatry, 44,* 243-249.

Arnautovska, U., McPhedran, S., Kelly, B., Reddy, P., & De Leo, D. (2016). Geographic variation in suicide rates in Australian farmers: What is the problem more frequent in Queensland than in New South Wales? *Death Studies, 40*(6), 367-372 doi:10.1080/07481187.2016.1153007

Australian Bureau of Statistics. (2006b). *National health survey: summary results* (No. 4364.0). Canberra, Australian Capital Territory: Author.

Australian Bureau of Statistics. (2007a). National survey of mental health and wellbeing (No. 4327.0). Canberra, Australian Capital Territory: Author.

Australian Bureau of Statistics. (2009). Australian social trends (No. 4102.0). Canberra, Australian Capital Territory: Author.

Bartik, W., Maple, M., & McKay, K. (2015). Suicide bereavement and stigma for young people in rural Australia: a mixed methods study. *Advances in Mental Health, 13*, (1), 84–95, http://dx.doi.org/10.1080/18374905.2015.1026301

Boyd, C.P., Hayes, L., Sewell, J., Caldwell, K., Kemp, D., Harvie, L., & Nurse, S. (2008). Mental health problems in rural contexts: a broader perspective: Response to Jackson et al. (2007). Mental health in rural contexts: What are the barriers to seeking help from professional providers? *Australian Psychologist, 43*(1), 2-6.

Bryant, L., & Garnham, B. (2015). The fallen hero: masculinity, shame and farmer suicide in Australia. *Gender, Place and Culture, 22*(1), 67-82 doi: 10.1080/0966369X.2013.855628

Buckby, B., & Gordon, A. (2015). Interprofessional communication. In: Professional and Therapeutic Communication. Oxford University Press, Melbourne, VIC, Australia, pp. 107-134

Buckby, B. & Mercurio, R. (2016). Preventing Suicide: What is it, and what do we need to know to do it well? (In progress)

Byles, J., Powers, J., Chojenta, C., & Warner-Smith, P. (2006). Older women in Australia: ageing in urban, rural and remote environments. Australasian Journal on Ageing, 25, 151-157.

Capp, K., Deane, F.P., & Lambert, G. (2001). Suicide prevention in Aboriginal communities: application of community gatekeeper training. *Australian and New Zealand Journal of Public Health, 25*(4), 315-321.

Chalmers, K.J., Bond, K.S., Jorm, A.F., Kelly, C.M., Kitchener, B.A., & Williams-Tichen, A.J. (2014). Providing culturally appropriate mental health first aid to an Aboriginal or Torres Strait Islander adolescent: development of expert consensus guidelines. *International Journal of Mental Health systems, 8*(1), 2-20.

Cantor, C.H., Slater, P.J., & Najman, J.M. (1995). Socioeconomic indices and suicide rate in Queensland. *Australian Journal of Public Health, 19,* 417-20.

Caldwell, T.M., Jorm, A.F., & Dear, K.B. (2004). Suicide and mental health in rural, remote and urban areas in Australia. *Medical Journal of Australia, 181*(7), 10-14.

Cerel, J, Maple, M., van de Venne, J., Moore, M., Flaherty, C., & Brown, M. (2016). Exposure to Suicide in the Community: Prevalence and Correlates in One U.S. State. *Public Health Reports*, 131 (1), 100-107.

Cheung, Yee Tak D., Spittal, M.J., Pirkis, J.& Yip, Paul, Siu Fai (2012). Spatial analysis of suicide mortality in Australia: Investigation of metropolitan-rural-remote differentials of suicide risk across states/territories. *Social Science & Medicine, 75,* 1460-1468 http://dx.di.org/10.10.16/j.socscimed.2012.04.008

Cheung, Yee Tak D., Spittal, M.J., Williamson, M.K., Tung, S.J., & Pirkis, J. (2014). Predictors of Suicides occurring within suicide clusters in Australia 2004-2008. *Social Science & Medicine, 118,* 135-142. Retrieved from http://dx.doi.org/10.1016/j.socscimed.2014.08.005

Christensen, H., (2016). Suicide Prevention in Australia: Where to from here: Policies and Implementation. *InPsych, 38*(1). 1-4.

Clifford, A.C., Doran, C.M., & Tsey, K. (2013). A systematic review of suicide prevention interventions targeting indigenous peoples in Australia, United States, Canada and New Zealand. *BioMed Central Public Health, 13,* 463. Retrieved from http://www.biomedcentral.com/1471-2458/13/463

Cox, L. (2010). Queensland Aborigines, Multiple Realities and the Social Sources of Suffering Part 2: Suicide, Spirits and Symbolism. *Oceania, 80*(3), 241-262 Retrieved from http://onlinelibrary.wiley.com.elibrary.jcu.edu.au/doi/10.1002/j.1834-4461.2010.tb00083.x/full

Curtis, C. (2010). Youth perceptions of suicide and help-seeking: 'They'd think I was weak or "mental." *Journal of Youth Studies, 13*(6). 699-715 doi: 10.1080/13676261003801747

De Leo, D., Cerin, E., Spathonis, K., & Burgis, S. (2005). Lifetime risk of suicide ideation and attempts in an Australian community: prevalence, suicidal process, and help-seeking behaviour. *Journal of Affective Disorders, 86*(2). 215-224.

De Leo, D., Sveticic, J., Kumpula, E.K. (2013): *Suicide in Queensland, 2008-2010: Mortality Rates and Related Data*, Brisbane.

De Leo, D., Sveticic, J., Milner, A., & McKay, K. (2011). *Suicide in Indigenous Populations of Queensland.* Brisbane: Australian Institute for Suicide Research and Prevention

Department of Health, *Western Australian Suicide Prevention Strategy 2009-2013: Everybody's business*, Department of Health WA. 2009 Retrieved from http://www.mentalhealth.wa.gov.au/Libraries/pdf_docs/WA_Suicide_Prevention_Strategy.sflb.ashx

Eagles, J.M., Carson, D.P., Begg, A., & Naji, S.A. (2003). Suicide prevention: a study of patients' views. *The British Journal of Psychiatry, 182*(3), 261-265.

Farrelly, T. & Francis, K. (2009). Definitions of suicide and self-harm behaviour in an Australian Aboriginal Community. *Suicide & Life-Threatening Behavior, 39*(2), 182-189 Retrieved from http://onlinelibrary.wiley.com.elibrary.jcu.edu.au/doi/10.1521/suli.2009.39.2.182/epdf

Fuller, J., Edwards, J., Procter, N., & Moss, J. (2000). How definition of mental health problems can influence help seeking in rural and remote communities. Australian Journal of Rural Health, 8, 148-153.

Giles, H., Coupland, J., & Coupland, N. (1991). Accommodation theory: Communication, context, and consequence. In H. Giles, J. Coupland, & N. Coupland (Eds.), Contexts of accommodation: Developments in applied sociolinguistics (pp. 1-68). Cambridge, UK: Cambridge University Press.

Goldney, R.D., Fisher, L.J., Wilson, D.., & Cheok, F. (2002). Mental Health Literacy of those with Major Depression and Suicidal Ideation: an impediment to help seeking. *Suicide and Life-Threatening Behavior, 32*(4), 394-404.

Gulbas, L.E., Hausmann-Stabile, C., De Luca, S.M., Tyler, T.R., & Zayas, L.H. (2015). An exploratory study of nonsuicidal self-injury and suicidal behaviors in adolescent Latinas. *American Journal of Orthopsychiatry, 84*(4), 302-314 doi.org/10.1037/ort0000073

Gunn, R.T., Langley, A.J., Dundas, S.J., & McCaul, K. (1996). *The human cost of work 2nd edition: A review of the occurrence and causes of occupational injury and disease in South Australia.* South Australian Health Commission.

Hanssens, L. (2007). The Search to identify contagion operating within suicide clusters in Indigenous Communities in Indigenous Communities, Northern Territory, Australia. *Aboriginal & Islander Health Worker Journal, 31(*5), 27-33.

Hanssens, L. (2010). "Suicide (Echo) Clusters": Are they socially determined, the result of a pre-existing vulnerability in Indigenous communities in the Northern Territory and how can we contain cluster suicides? *4th Asia Pacific Regional Conference, International Association for Suicide Prevention 17-20 November, 2010, Brisbane Australia.*

Haw, C., Hawton, K., Niedzwiedz, C., & Platt, S. (2013). Suicide clusters: a review of risk factors and mechanisms. *Suicide and Life-Threating Behavior, 43*(1), 97-108 doi: 10.1111/j.1943-278X.2012.00130.x

Hergl, U. Rummel-Kluge, C., Varnik, A., Arensman, E., & Koburger, N. (2013). Alliances against depression: a community based approached to target depression and to prevent suicidal behaviour. *Neuroscience and Biobehavioral Reviews, 37*(10.1). 2404-2409 doi: 10.1016/jneubiorev.2013.02.009

Hoyt, D. R., Conger, R. D., Valde, J. G., & Weihs, K. (1997). Psychological help seeking in rural America. American Journal of Community Psychology, 25(4), 449-470.

Hunter, E., Reser, J., Baird. M., & Reser, B. (1999). An analysis of suicide in Indigenous Communities of North Queensland: The historical, cultural and symbolic landscape. Canberra: Commonwealth of Australia.

Isaacs, A.N., Pyett, P., Oakley-Browne, M.A., Gruis, H., & Waples-Crowe, P. (2010). Barriers and facilitators to the utilization of adult mental health services by Australia's Indigenous people: seeking a way forward. *International Journal of Mental Health Nursing, 19*(2), 75-82.

Joiner, T.E. (1999). The Clustering and contagion of suicide. *Current Directions in Psychological Science, 8*(3), 89-92

Joiner TE. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press

Joiner T.E. (2010). *Myths about suicide.* Cambridge: Harvard University Press

Joiner, T.E., Van Orden, K.A., Witte, T.K., & Rudd, M.D. (2009). *The Interpersonal Theory of Suicide: guidance for working with suicidal clients.* Washington, DC*:* American Psychological Association

Jorm, A.F. (2012). Mental Health Literacy: empowering the community to take action for better mental health. *American Psychologist, 67*(3), 211-243 doi: 10:1037.a0025957

Kelly, C.M., Jorm, A.F., & Rodgers, B. (2006). Adolescents' responses to peers with depression or conduct disorder. *Australian and New Zealand Journal of Psychiatry, 40,* 63-66.

Klingspon, K.L., Holland, J.M., Neimeyer, R.A., & Lichtenthal, W.G. (2015). Unfinished business in bereavement*. Death Studies*, 39, 387–398 doi: 10.1080/07481187.2015.1029143

Kopera, M., Suszek, H., Bonar, E., Myszka, M., Gmaj, B. Igen, & Wojnar, M. (2015). Evaluating explicit and implicit stigma of mental illness in mental health professionals and medical students. *Community Mental Health Journal, 51,* 628-634 doi: 10.1007/s10597-014-9796-6

Krysinska, K., Batterham, P.J., Tye, M., Shand, F., Calear, A.L., Cockayne, N., & Christensen, H. (2016). Best strategies for reducing the suicide rate in Australia. *Australian & New Zealand Journal of Psychiatry, 50*(2), 115-118 doi: 10.1177/0004867415620024

Laing, K.R. (2013). *Suicide, Stigma, and Interpersonal Needs: Implications for Prevention.* (Unpublished Masters of Clinical Psychology Thesis, James Cook University, Australia).

Lutkin, S. J. & Helmes, E. (2011). *Interpersonal dependency as a mediator of anxiety in older adults* (unpublished Doctor of Psychology [Clinical] thesis).

McDonald, C., & Zetlin, D. (2004). The more things change: Barriers to community services utilisation in Queensland. Australian Social Work, 57, 115-126.

Mental Health Commission, *Suicide Prevention 2020: together we can save lives.* Government of Western Australia, Retrieved from http://www.mentalhealth.wa.gov.au/Libraries/pdf_docs/Suicide_Prevention_2020_Strategy_Final_3.sflb.ashx

Milner, A., Spittal, M.J., Pirkis, J., La Montagne, A.D. (2013). Suicide by occupation: systematic review and meta-analysis. *The British Journal of Psychiatry, 203*(6) 409-416; DOI: 10.1192/bjp.bp.113.128405

O'Kane, A. & Tsey, K. (2004). Towards a needs based mental health resource allocation and service development in rural and remote Australia. Australasian Psychiatry, 12, 390-395.

Page, A.N. & Fragar, L.J. (2002). Suicide in Australian Farming, 1988-1997. *Australian and New Zealand Journal of Psychiatry, 36*(1), 81-85.

Queensland Mental Health Commission, *Queensland Suicide Prevention Action Plan 2015-2017.* Queensland Mental Health Commission 2015 Retrieved from https://www.qmhc.qld.gov.au/wp-content/uploads/2015/09/Queensland-Suicide-Prevention-Action-Plan-2015-17_WEB.pdf

Quine, S., Bernard, D., Booth, M., Kang, M., Usherwood, T., Alperstain, G., & Bennett, D. (2003). Health and access issues among Australian adolescents: a rural-urban comparison. Rural and Remote Health, 3(3), 245.

Maple, M., Kwan, M., Borrowdale, K., Riley, J., Murray, S., & Sanford, R. (2016). *The ripple effect: understanding the exposure and impact of suicide in Australia.* Sydney: Suicide Prevention Australia.

McPhedran, S. (2015). Does the resources sector have higher suicide rates? A comparative analysis of suicide rates among men in the mining industry and other occupations, in Queensland (Australia). *Work, 5*(51), 255-260 doi: 3233/WOR-152019

McPhedran, S., & De Leo, D. (2013). Suicide among miners in Queensland, Australia: a comparative analysis of demographics, psychiatric history, and stressful life events. *Sage Open, October-December,* 1-9 doi: 10.1177/2158244013511262

Page, A., Morrell, S., Taylor, R., Carter, G., & Dudley, M. (2006). *Social Psychiatry and Psychiatric Epidemiology, 41* (11) 911 doi: 10.1007/s00127-006-0112-9

Peel, R. & Buckby, B. (2015). *Cultural values and attitudes to ending life.* (Unpublished Honours thesis, James Cook University, Australia)

Perrott, B.E. (2013). Knowledge Flows in Health Communities of Practice. *Health Marketing Quarterly*, *30*(4), 319-333 doi: 10.1080/07359683.2013.844017

Pettman, J. & Buckby, B. (2015). *Professional Knowledge: working with suicidal individuals in practice*. (Unpublished Honours Thesis, James Cook University, Australia).

Pierce, D., Little, F., Bennett-Levy, J., Isaacs, A.N., Bridgman, H., Lutkin, S.J., Carey, T.A., Schlicht, K.G., Mcabe,-Gusta, Z.P., Martn, E., & Martinez, L.A. (2016). Mental health academics in rural and remote Australia. *Rural and Remote Health*, *16.* 1793 (Online). Ttp://www.rrh.org.au

Pitman A.L, Osborn D.P., Rantell, K, & King, M.B. (2015). Bereavement by suicide as a risk factor for suicide attempt: a cross-sectional national UK-wide study of 3432 young bereaved adults. *BMJ Open 6*, e009948. doi:10.1136/bmjopen-2015- 009948

Player, M.J., Proudfoot, J., Fogarty, A., Whittle, E., Spurrier, M., Shand, F., Christensen, H., Hadzi-Pavlovic, D., & Whilhems, K. (2015). What Interrupts Suicide Attempts in Men: A Qualitative Study. *Plos One, 10*(6), e0128180 doi:10.1371/journal.pone.0128180

Price, M. & Dalgleish, J. (2013). Help-seeking among Indigenous Australian adolescents: exploring attitudes, behaviours and barriers. *Youth Studies Australia 32*(1), 10-18

Reavley, N.J., Jorm, A.F. (2011) National Survey of Mental Health Literacy and Stigma. Department of Health and Ageing, Canberra.

Reijneveld, S. A., & Schene, A. H. (1998). Higher prevalence of mental disorders in socio-economically deprived urban areas in the Netherlands: community or personal disadvantage? Journal of Epidemiology and Community Health, 52, 2-7.

Reser, J.P. (1989) Australian aboriginal suicide deaths in custody: Cultural context and cluster evidence, Australian Psychologist, 24:3,325-342 http://dx.doi.org/10.1080/00050068908259573

Rickwood, D.J., Deane, F.P. & Wilson, C.J. (2007). When and how do young people seek professional help for mental health problems? *Medical Journal of Australia, 187*(7), S35.

Roe, J. (2010). Ngarlu: a cultural and spiritual strengthening model. In Purdie, Dudgeon & Walker (Eds.). *Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice,* (pp.245-299). Australia: Department of Health and Ageing.

Ross, C.E. (2011). Collective threat, trust, and the sense of personal control. *Journal of Health and Social Behavior, 52*(3), 287-296 doi: 10.1177/0022146511404558

Ross, C.E., Mirowsky, J., & Pribesh, S. (2001). Powerlessness and the amplification of threat: Neighbourhood disadvantage, disorder, and mistrust. *American Sociological Review. 66*(4), 568-591.

Seward, A-L. & Harris, K.M. (2016). Offline versus online suicide-related help seeking: changing domains, changing paradigms. *Journal of Clinical Psychology, 72*(6), 606-620 doi: 10.1002/jclp.22282

Silburn, S., Robinson, G., Leckning, B. Henry, D., Cox, A., & Kikertt, D. (2014). Preventing Suicide among Aboriginal Australians. In P. Dudgeon, H. Milroy, & R. Walker (Eds.) *Worthing Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice,* (pp.147-164). Canberra: Commonwealth of Australia

Stodden, A.V., & Buckby, B. (2013). *Community Attitudes and Beliefs about Suicide: Perceptions of Suicide Risk* (Unpublished Honours Thesis, James Cook University, Australia).

Stodden, A.V, Lutkin, S., & Buckby B. (2016). *The Journey to Suicide: Attitudes and Beliefs about suicide in a Remote Australian Community* (Unpublished Masters of Clinical Psychology Thesis, James Cook University, Australia).

Sveticic, J., Milner, A., & De Leo, D. (2012). Contacts with mental health services before suicide: a comparison of Indigenous and non-Indigenous Australians. *General Hospital Psychiatry, 34*(2), 185-191.

Tighe, J., McKay, K., & Maple, M. (2015). 'I'm going to kill myself if you don't…': contextual aspects of suicide in Australian Aboriginal communities. *International Journal of culture and Mental Health, 8*(1), 1-12, doi.org/10.1080/17542863.2013.861499

Van Orden, K.A., Witte, T.K., Cukrowicz, K.C., Braithwaite, S., Selby, E.A., & Joiner, T.E. (2010). The Interpersonal Theory of Suicide. *Psychological Review, 117*(2), 575-600 doi: 10:1037/a0018697

Vicary, D., & Westerman, T. (2004). That's just the way he is: Some implications of Aboriginal mental health beliefs. *Australian e-Journal for the Advancement of Mental Health, 3*(3), 103-112.

Wenz. F.V. (1977). Subjective powerlessness, sex and suicide potential. *Psychological Reports, 40,* 927-928. Retrieved from http://prx.sagepub.com/content/40/3/927.full.pdf+html

WIN-Gallup International (2012). *Global Index of Religiosity and Atheism*. Retrieved from http://www.wingia.com/web/files/news/14/file/14.pdf

Web Pages and downloads:

Aboriginal and Torres Strait Islander suicide: origins, trends and incidence

http://www.health.gov.au/internet/publications/publishing.nsf/Content/mental-natsisps-strat-toc~mental-natsisps-strat-1~mental-natsisps-strat-1-ab

Australian Government – Systems approach to suicide prevention guidance on planning, commissioning and monitoring. (Document for Primary Health Networks)

http://www.health.gov.au/internet/main/publishing.nsf/Content/2126B045A8DA90FDCA257F6500018260/$File/An%20evidence-

based%20systems%20approach%20to%20suicide%20prevention%20guidance%20on%20planning,%20commissioning%20and%20monitoring.pdf

Australian postcodes

www.postcodes-australia.com/postcodes/

Black Dog Institute: Implementation plan for the systems approach to suicide prevention in NSW

http://www.blackdoginstitute.org.au/docs/BDI_systemsapproachsummarypaper.pdf

Life: living is for everyone.com.au a framework for prevention of suicide in Australia

http://www.livingisforeveryone.com.au/uploads/docs/LIFE_framework-web.pdf

Lifeline Australia:

https://www.lifeline.org.au/static/uploads/files/helping-someone-at-risk-of-suicide-wfbbcjsjuwkh.pdf

Mindframe Media

http://www.mindframe-media.info/for-media/reporting-suicide/facts-and-stats

National Suicide prevention lifeline (not Australian)

http://suicidepreventionlifeline.org/how-we-can-all-prevent-suicide/

National Suicide Summit – CRESP / Black Dog Institute: National Suicide Prevention Summit 2015

http://www.blackdoginstitute.org.au/docs/SystemsApproachBackground.pdf

Queensland Suicide Prevention Action Plan 2015-2017

https://www.qmhc.qld.gov.au/wp-content/uploads/2015/09/Queensland-Suicide-Prevention-Action-Plan-2015-17_WEB.pdf

Government of Western Australia Mental Health Commission Suicide Prevention 2020

http://www.mentalhealth.wa.gov.au/Libraries/pdf_docs/Suicide_Prevention_2020_Strategy_Final_3.sflb.ashx

World Health Organisation http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/

Appendix A

Suicide Methods: Implications for Prevention and Intervention: A comparison of Indigenous and Non-Indigenous choices

(Based on De Leo et al., 2011)

The act of killing oneself has consequences that are far broader than the individual concerned and their immediate family. The most effective prevention and intervention at the critical risk time will need to take into account the differences in preferred methodologies for suicide amongst Indigenous and non-Indigenous Queenslanders to address risk and develop an intervention plan most suited to the person.

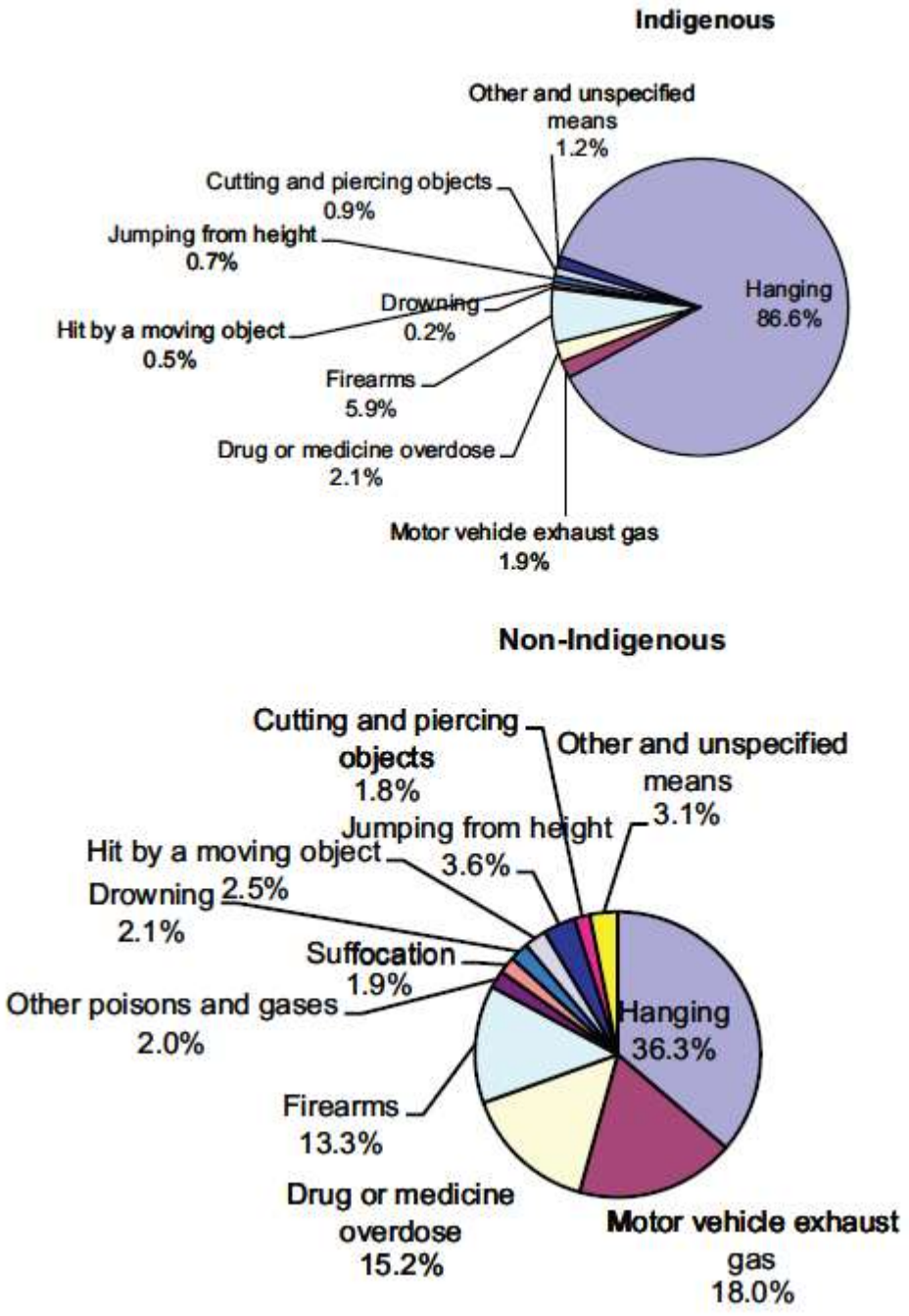


Figure A1. Suicide methods, Indigenous and non-Indigenous populations, Qld. 1994-2006 (De Leo et al., 2011, p. 41

Appendix B

Superordinate Theme: The journey toward suicide		
Themes & *Sub-themes*	**Definitions**	**Examples**
Cries for help (verbal and non-verbal)	Warning signs of risk paired with an urgency to respond – cries indicate increasing risk/lethality	I think you have to take all of them (cries for help) seriously… it's a sign that they're going to become suicidal, but I don't think they're at that real suicidal stage. (Vivienne)
Tunnel Vision	Narrow focused mindset that causes the suicidal person to focus exclusively on emotional pain	If you become suicidal, you've almost got tunnel vision… you just see what's going on to yourself…it's a mindset… it's sort of very 'tunnelly'.. you get so drawn into the situation you're almost in a trance (Vivienne)
• *Best and only option*	Tunnel vision ultimately results in viewing suicide as the best and only option to end pain, feelings of burdensomeness and hopelessness	They've just lost hope or they don't see any way forward and it just seems like the right thing to do.. or maybe for whatever reason…. Ultimately they think it may be the best thing for their family (Erin)
• Interrupting tunnel vision	Supporting suicidal people by providing genuine love and care to move away from narrow-focused mindset	Just talking from family…I reckon it's the love thing…If it's coming through with genuine love – the interruption – you might not stop it in the long run, but you might stop it just for then…It's the love thing; the bond (Charmaine)
• *Breaking points*	Suicidal person experiences build-up of stressors and lacks coping resources, ultimately feeling defeated.	People read a breaking point… everything just gets too much. There's no coping mechanisms left, and there's triggers….they've had a gutful (Charmaine)
• *Impulsive act*	Act of suicide is impulsive at breaking points, reflecting that suicidal ideation is distinct from the act itself.	I feel that the actual act of suicide, when someone's really suicidal, it's in those maybe 20 minutes-30 minutes before they do it…so tunnelled on their pain that they're not looking outside the box…..not thinking about tomorrow. They're thinking there and then, and it can happen on the spur of the moment (Vivienne)
Impact after suicide	The guilt, self-blame and blame attributed by others, following a suicide death.	I saw the destruction it caused...cos it's the blame…anger, distrust (sigh)… our family…it just split. There's only four of us kids and it just split us because of that blame… accusations that were made…and sometimes I think that's how people respond when they don't deal with it themselves. It is easy to blame someone else (Lara)
Capability to suicide • *External forces*	Circumstances external to the individual that provides capability to suicide, such as substance use and social isolation/rejection	I do know for a fact that people who drink alcohol and take drugs at the same time, like a lot of teens do, that's the biggest majority of people who actually go through with it. (Vivienne).
• *Personal attributes*	Conflicting beliefs about people who suicide: positive attributes (strength, courage, determination) and negative attributes (anger, desire for payback, emotional pain) that premises capability for suicide.	***Positive:*** I guess it takes commitment to go ahead with something like that…. I think it does take motivation to complete….there is an element of being strong (Erin)

		Negative: Some of them wouldn't look at it like that, but as payback – they treatment me like shit all the time, I'll show them what I can do…just go around the corner and do it (Nola)
Expectations • *Help-seeking* • *Self-coping*	Expectations that suicidal people should have the capacity to independently seek help and cope. And, expectations that those who have reasons for living will not consider suicide	If someone is…not prepared to put their hand up or make a phone call or talk to family or whatever…if they're not willing to share that's where they're at, then (suicide) it's just going to happen (Charmaine) Shit happens in life. Not every road is a smooth road…..while he goes through a period of anger and pain, be able to see past that and put it down to a learning experience….learn from it and move on….and just know that everybody does that: It's just life (Lara)
• *Reasons for living*		He's got a good family, a caring family, a big family, a large circle of friends, sporting interest….he's got a life….something to live for (Lara)
Cultural / Spiritual beliefs • Behavioural signs of risk • *Shame*	Attitudes/ beliefs specific to Aboriginal Australians Behavioural signs that communicate suicide risk Shamed to seek help for suicidal ideation for fear of being negatively evaluated.	If he's thinking of doing himself in….there's a good change that he'd avoid contact, especially with his brothers and sisters….. they tell from your tone of voice…. They pick up – your family (Charmaine) A lot of the Indigenous people don't want to get help from anybody…. They'd be shamed to talk to anybody about their problems… and he (john) must have problems and who's he gonna talk to? He's too ashamed to talk to anybody and tell them anything, cos they might think that he's stupid and mad…. The next best thing he knows is to go and do it (suicide) (Nola)
• External Influence	Factors outside a person's control influence behaviour, reflecting helplessness and a desire to move away from feared stimulus.	That's their (Aboriginals) reason why they hate themselves sometimes…. Its cos of the Hangman. He's not a myth; he's for real….he keeps on tempting them…..especially those drunken ones…so they're easy prey….and the first think they think about is oh well, if I kill myself, he can't get me…and that's…no good. Cos once you start thinking like that, nobody can help you (Nola)

Note. All names are pseudonyms

Appendix C

MYTHS ABOUT SUICIDE (Joiner, 2010)
Suicide is an easy escape, one that cowards use
Suicide is an act of anger, aggression or revenge
Suicide is selfish
People often die by suicide ‘on a whim’
If people want to die, we can’t stop them
Suicide is just a cry for help

Appendix D

Warning Signs for Suicide	Common Risk Factors
Talking about wanting to die or to kill themselves	*Having a mental health disorder particularly mood disorders such as Depression*
Looking for a way to kill themselves, like searching online or buying equipment (e.g., gun, *rope, stockpiling medications*)	Alcohol and substance abuse disorders
Talking about feeling hopeless or having no reason to live	Hopelessness
Talking about feeling trapped or in unbearable pain	Impulsive and or aggressive tendencies
Talking about being a burden to others	History of trauma or abuse
Increasing the use of alcohol or drugs	Major physical illnesses
Acting anxious, agitated; behaving recklessly (*or out of character)*	Major physical illnesses
Sleeping too little or too much (*or noticeable change in sleeping patterns/behaviour*)	Previous suicide attempt or attempts
Withdrawing or isolating themselves	Family history of suicide
Showing rage or talking about seeking revenge	Job or financial loss
Extreme mood swings	Loss of relationship(s)
Ask if they are suicidal. Offer help: Link in with a professional service/person	Easy access to lethal means
	Local clusters of suicide (*especially if people are personally known*)
	Lack of social support and sense of isolation (*even if no objectively true*)
	Stigma associated with asking for help
	Lack of healthcare, especially mental health and substance abuse treatment
	Enabling cultural and religious beliefs about ending life (*e.g., it is a noble act*)
	Exposure to others who have died by suicide (in real life or via the media and internet
	Being young, male and /or Aboriginal / Torres Strait Islander

Townsville SUICIDE PREVENTION NETWORK

Note. The information used here is taken mostly from the National suicide prevention lifeline webpage http://suicidepreventionlifeline.org/how-we-can-all-prevent-suicide/ Modifications to list are in italics

APPENDIX E

EXPLANATORY NOTES

1. Other life-ending events: For single car accidents for example, unless there is a suicide note it will be deemed an accident. There are also differences on what criteria is used to identify a death as suicide between states and particularly countries so it is also hard to compare rates with similar regions in other states.

2. Help-seeking: In some smaller locations there are less services available which limits opportunities to get help from a mental health practitioner. This means that the importance of knowledge about what to do at the critical time is more important than ever in smaller communities. Fuller, Edwards, Procter and Moss (2000) examined the factors that influenced help seeking behaviour in a rural Australian population. From interviews with rural professionals, such as community nurses, general practitioners, and social workers, they reported that people from rural areas had a reluctance to admit that distress was a mental health issue, and was one factor that reduced help seeking behaviour. The other factors that were reported to influence help seeking behaviour were the stigma of mental health and the culture of rural communities, such as being self-reliant and mistrusting outsiders. McDonald and Zetlin (2004) examined the perceptions of community service providers to understand some of the barriers to seeking services and found that barriers for older adults include pride and shame, and there was also a lack of knowledge about the services available. For Indigenous people, the overtly medical appearance of mental health services prevented attendance. Health services in general may be under-utilised by older adults, particularly in rural and remote areas. Byles, Powers, Chojenta and Warner-Smith (2006) asked 12,432 Australian women to complete a survey on service utilisation and found Australian women living in urban areas used health services more than women in non-urban areas. The reduced service utilisation in non-urban areas reflects the lack of service providers in these areas (Australian Bureau of Statistics, 2009). Mental health issues in rural Australia may also be limited by access to mental health services in the majority of rural and remote locations. Services differ considerably between major cities and very remote areas, with 33 services per 1000 people in major cities, 22 services per 1000 people in remote areas, and only 5 services per 1000 people in very remote areas (Australian Bureau of Statistics, 2009). In addition they are often under-resourced (O'Kane & Tsey, 2004). Access to services also differs based on geographic location, with 113 per 1000 people accessing services in major cities, and 19 per 1000 accessing services in very remote areas (Australian Bureau of Statistics, 2006b). This is consistent with Fuller's et al. (2000) study, but the reasons for the low access rates are unclear. A national survey also found that 22.7% of people with a mental disorder living outside of major cities felt their needs for assistance were unmet (Australian Bureau of Statistics, 2007a).Rural and remote areas are more economically disadvantaged than urban areas. Such areas have a higher prevalence of mental disorders (Reijneveld & Schene, 1998).

3. Professional and organisational constraints: The ability to communicate in professional and organisational contexts is more complex than it seems at first glance. The message a speaker wants to convey to a person of a different profession is not always what the message receiver hears. This form of miscommunication can occur in interprofessional teams and have an unintended impact on the patient or client. "Clean" communication needs the message sent to also be the message received and then follow through to effective intervention and care of the patient or client's needs. Another constraint in organisations is the ability of teams to work together due to internal team conflicts, and power relationships.