3. Major Findings

3.1 Recording Indigenous Status in Hospital Data

The validation study showed that indigenous status is considerably under-recorded - by somewhere between two and six-fold - in SDMH Emergency Department data. This is likely to flow through to hospital separation data. Real indigenous injury rates among indigenous Shoalhaven residents are likely to be at least three times higher than those estimated using the routine hospital data collections (i.e. EDIS and the ISC).

3.2 Routine Hospital Data

Over the two-year period 1996/97-1997/98, 150 hospital separations for injury were recorded among indigenous Shoalhaven residents. Males accounted for 65% of these admissions, and over half of these were among males aged 15-29 years. In contrast, for females injuries were most common in the age groups 0-4 years and 40-44 years (Figure 1).

Standardised Separation Ratios (SSR) were calculated to provide a comparison of indigenous and non-indigenous injury hospital separation rates (Table 3). According to this analysis, in 1996/97-1997/98 injury hospitalisation rates among indigenous people in the Shoalhaven were about 15% higher for males and 18% higher for females, than in the general Shoalhaven population. However, considering the results of the validation study, it is more likely that indigenous injury hospital separation rates in the Shoalhaven are more than three times higher (i.e. at least 200% higher) than for the general population.

FIGURE 1:
Injury-related hospital separations among indigenous Shoalhaven residents, 1996/97-1997/98

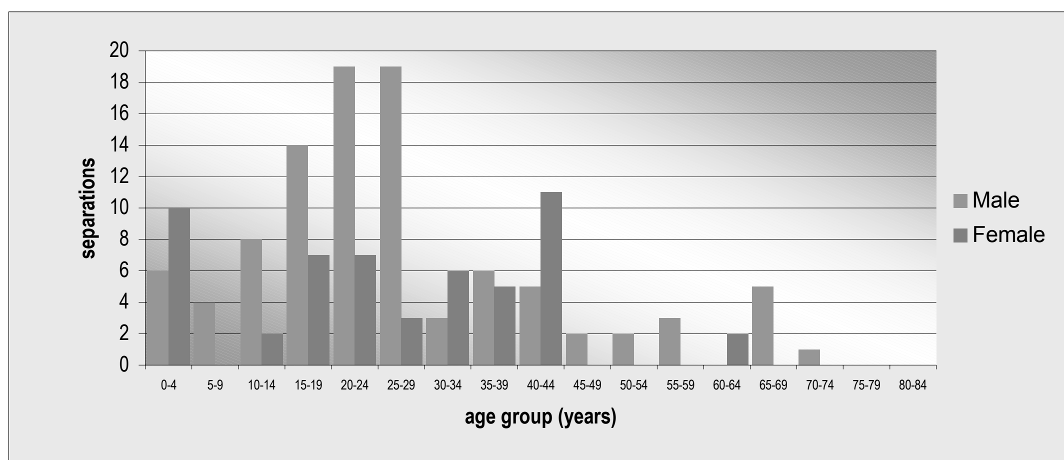


TABLE 3:
Comparison of injury-related hospital separations among indigenous and general populations, Shoalhaven Local Government Area, 1996/97-1997/98

Broad Injury Type [A]	Observed	Expected	SSR[B]	Lower CI[C]	Upper CI
Males					
Transport accidents	17	16.7	102.0	59.4	163.4
Accidental falls	24	23.4	102.7	65.8	152.8
Misadventure during or due to medical care	12	8.25	145.5	75.2	254.1
Other accidents, late effects	31	24.0	129.0	87.6	183.0
Self-harm	6	2.99	200.5	73.6	436.5
Interpersonal violence	7	4.20	166.9	67.1	343.8
Total	***97***	*84.7*	***114.6***	*92.9*	*139.8*
Females					
Transport accidents	7	5.56	125.9	50.6	259.3
Accidental falls	5	15.1	33.1	10.8	77.3
Misadventure during or due to medical care	4	5.79	69.1	18.8	176.9
Other accidents, late effects	10	8.91	112.2	53.8	206.4
Pharmaceutical poisoning	4	2.08	192.3	52.4	492.4
Self-harm	**15**	**4.34**	**345.4**	**193.3**	**569.7**
Interpersonal violence	**8**	**1.14**	**702.5**	**303.3**	**1384.2**
Total	***53***	*45.0*	***117.7***	*88.2*	*154.0*

[A] Cause of injury is based on standard aggregations of the ICD9 External Cause (E-code) classification (see Appendix 2). Injury types where no injuries occurred in the indigenous population have been excluded from the table.
[B] Age adjustment of rates was made by indirect standardisation, using the 1997 general Shoalhaven population as the standard. The Standardised Separation Ratio (SSR) is the ratio of the number of observed to `expected' injury separations among indigenous people, multiplied by 100. The `expected' numbers have been estimated by applying age-specific injury rates in the general Shoalhaven population to the numbers of indigenous Shoalhaven residents in the specific age groups. Therefore, an SSR of 100 means that the indigenous rate is equal to the general population rate, taking into account different age structures of the populations. Where the SSR is greater than 100 the indigenous injury rate is apparently higher.
[c] Confidence intervals (CI) around the SSR help indicate whether any apparent differences are likely to have occurred due to chance fluctuations. If the lower CI is above 100 (so that the indigenous rate is considered `significantly' higher than the non-indigenous rate), then it is considered very unlikely that the higher indigenous rate is due to chance alone. On the other hand, `non-significant' differences (i.e. when the lower and upper CIs span 100) should not be automatically dismissed as `non important'. Because the numbers of indigenous hospitalisations in small areas such as the Shoalhaven are small, the confidence intervals are wide. Even though the indigenous rates may be much higher, statistical significance is not often reached. This problem is compounded by the underestimation of indigenous injury rates, due to the poor recording of indigenous status in the hospital data.

TABLE 4:
Comparison of injury-related Emergency Department presentations among indigenous and general populations, Shoalhaven Local Government Area, 1996 -1998.

Injury Type [A]	Observed	Expected	SPR[B]	Lower CI[C]	Upper CI
Males					
Fractures, dislocations, strains, strains	182	173.4	104.9	90.2	121.3
Open wounds, intracranial, internal, blood vessel	**225**	**186.1**	**120.9**	**105.6**	**137.7**
Late effects, burns, superficial, other	121	147.5	82.0	68.1	98.0
Poisoning, toxic effects	11	16.4	66.9	33.4	119.7
Other, unspecified effects of external causes	**30**	**15.3**	**196.3**	**132.4**	**280.2**
Complications of surgical, medical care (not elsewhere classified)	12	9.16	130.9	67.7	228.7
Total	***581***	*548.0*	***106.0***	*97.6*	*115.0*
Females					
Fractures, dislocations, strains, strains	82	112.3	73.0	58.1	90.7
Open wounds, intracranial, internal, blood vessel	**93**	**74.1**	**125.5**	**101.3**	**153.8**
Late effects, burns, superficial, other	80	80.2	99.7	79.1	124.1
Poisoning, toxic effects	22	14.3	154.2	96.6	233.5
Other, unspecified effects of external causes	**25**	**12.6**	**199.2**	**128.9**	**294.0**
Complications of surgical, medical care (not elsewhere classified)	3	6.45	46.5	9.60	136.0
Total	***305***	*299.9*	***101.7***	*90.6*	*113.8*

[A] Cause of injury is based on standard aggregations of the ICD9 classification. See Appendix 2.
[B] Age adjustment of rates was made by indirect standardisation, using the 1997 general Shoalhaven population as the standard. The Standardised Presentation Ratio (SPR) is the ratio of the number of observed to `expected' injury ED presentations among indigenous people, multiplied by 100. The `expected' numbers have been estimated by applying age-specific injury rates in the general Shoalhaven population to the numbers of indigenous Shoalhaven residents in the specific age groups. Therefore, an SPR of 100 means that the indigenous rate is equal to the general population rate, taking into account different age structures of the populations. Where the SSR is greater than 100 the indigenous injury rate is apparently higher.
[C] Confidence intervals (CI) around the SPR help indicate whether any apparent differences are likely to have occurred due to chance fluctuations. If the lower CI is above 100 (so that the indigenous rate is considered `significantly' higher than the non-indigenous rate), then it is considered very unlikely that the higher indigenous rate is due to chance alone. On the other hand, `non-significant' differences (i.e. when the lower and upper CIs span 100) should not be automatically dismissed as `non important'. Because the numbers of indigenous ED presentations in small areas such as the Shoalhaven are small, the confidence intervals are wide. Even though the indigenous rates may be much higher, statistical significance is not often reached. This problem is compounded by the underestimation of indigenous injury rates, due to the poor recording of indigenous status in ED data.

In 1996/97-1997/98, the most common causes of injury-related hospital separations among indigenous Shoalhaven residents were: falls (19%), transport accidents (10%), self-harm (14%), misadventure during or due to medical care (11%), and interpersonal violence (10%) (Table 3). While among indigenous males, falls and transport accidents predominated, the most common cause of injury-related hospitalisation among indigenous females was self-harm, followed by interpersonal violence (Table 3).

Notwithstanding the under-recording of indigenous status at SDMH, in 1996/97-1997/98 hospital separation rates for self-harm and interpersonal violence among both indigenous Shoalhaven males and females were clearly higher than for the general Shoalhaven population (Table 3). In fact for females, the excesses of both these injury types in the indigenous population, compared to the general population, were (statistically) significant.

Consistent with the hospital separation data, analysis of the routine Emergency Department (ED) data shows that injury ED presentation rates for indigenous Shoalhaven residents are only slightly higher than for the general population. In 1996-1998 these rates were just 6% higher for males and 2% higher for females (Table 4). However, given the results of the validation study, it can be assumed that the real indigenous injury ED presentation rates in the Shoalhaven are considerably (probably at least three times) higher than for the general population.

In 1996-1998, the most common broad categories of injury leading to ED presentation among indigenous Shoalhaven residents were: `open wounds, intracranial, internal, blood vessel injuries' (36%); `fractures, dislocations, sprains, strains' (30%); and `late effects, burns, superficial, other injuries' (23%) (Table 4). More detailed categories of injury are shown in Appendix 3 (Table A4.1). The vast majority of the `open wounds, intracranial, internal, blood vessel injuries' were accounted for by open wounds, particularly to the upper body and head.

Notwithstanding the under-recording of indigenous status, in 1996-1998 ED presentation rates for open wounds to the upper body for males and females, and open wounds to the head for males, were significantly higher in the indigenous population than in the general Shoalhaven population (Table A3.1). For females, ED presentation rates for pharmaceutical poisonings were also significantly higher in the indigenous population (Table A3.1).

3.3 Overview of Data from Other Sources

Analyses of detailed ED case notes information, and responses to interviews and focus groups, allowed a much greater understanding of indigenous injury patterns and causes. Information from all these sources is summarised in this section under sub-headings corresponding to the main questions asked of participants in the interviews and focus groups.

Generally, responses made by participants during the interviews and focus groups were candid, direct and extremely illuminating in terms of people's opinions and experiences relating to injury. A high degree of duplication of responses to all the questions was evident in both the interviews and the focus group discussions. These responses were also reflected in the quantitative data obtained through the review of ED case notes.

What are the main types of injuries among indigenous people in the Shoalhaven?

The ED case notes review found that, of the 405 indigenous people recorded as presenting to the SDMH ED for an injury in 1999, just over half had an open wound/ cut (26%) or a sprain/ strain (25%) as their main injury. The next most common types of injury leading to ED presentation in 1999 were fractures (7%), concussion/ intracranial (i.e. head) injury (7%), and poisonings (excluding bites) (5%) (Table 5). While nearly twice as many males and females presented to the ED with an injury in 1999, males and females experienced a similar pattern of types of injury.

Responses from participants in the interviews and focus groups concerned a broad range of types of injuries. Typically, responses from the different demographic groups were similar, and reflected the information obtained from the ED case notes review. The main types of injuries discussed by respondents were:

- lacerations (cuts and grazes) – face and head region, hands and feet;
- bruises and contusions – face, head and hands;
- sprains, strains and dislocations – shoulders, elbows, wrists, hands, knees, ankles and toes;
- fractures – facial, shoulders, elbows, wrists and ankles;
- poisonings - alcohol-related, overdose of non-prescription drugs (amphetamines and narcotics); and
- head injuries - related to involvement in contact sport, drug and alcohol use and interpersonal violence.

TABLE 5:
Type of injury among indigenous people presenting to SDMH Emergency Department, by sex, 1999

Type	Female	Male	Total	Percent
Open wound/ cut	36	70	106	26%
Sprain/ strain	35	68	103	25%
Fracture	13	17	30	7%
Concussion/ intracranial injury	10	18	28	7%
Poisoning excluding bites	5	14	19	5%
Burn/ corrosion	2	10	12	3%
Muscle/ tendon injury	0	12	12	3%
Crush injury	5	5	10	2%
Multiple injuries	6	4	10	2%
Other specified	3	7	10	2%
Superficial injuries excluding eye	5	5	10	2%
Blood vessel injury	4	5	9	2%
Foreign body into soft tissue	2	7	9	2%
Bite venomous	3	5	8	2%
Dislocation	1	7	8	2%
Eye injury	3	6	9	3%
Foreign body in gastrointestinal tract	2	1	3	1%
Foreign body in nose	3	0	3	1%
Unspecified trauma	1	2	3	1%
Asphyxia with no foreign body	0	1	1	0%
Dental	0	1	1	0%
Electrical	1	0	1	0%
Total	140	265	405	100%

What are the main causes of injuries among indigenous people in the Shoalhaven?

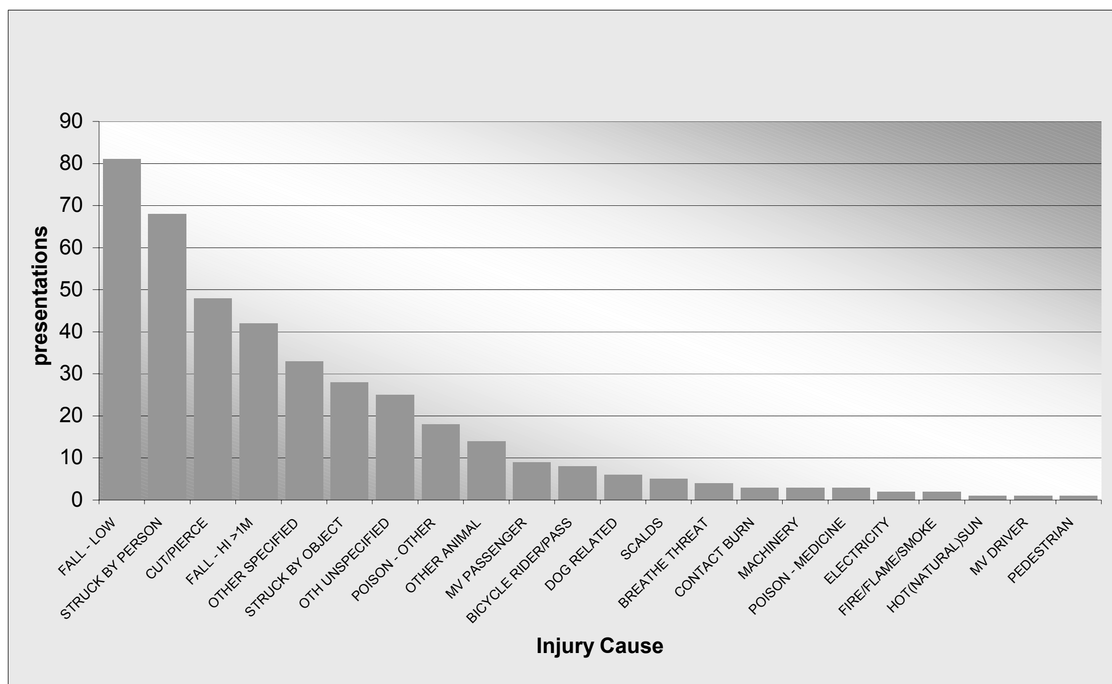
The ED case notes review found that the most common causes of injury-related presentations in 1999 for indigenous people were falls (30%), followed by being struck by a person (17%) and cutting and piercing (12%) (Figure 2, Table A3.2 in Appendix 3).

Two thirds of **falls** presentations were due to low falls (less than 1 metre) (Figure 2, Table A3.3). Both high and low falls were common among children aged less than 15 years, with 41% of all injury-related ED presentations among children being due to falls. Low falls were also common among adolescents and young adults, accounting for 41% of all presentations among 15-34 year olds (Table A3.3). The most common activities associated with falls were leisure activities (53%) followed by sport (20%), and being nursed/ cared for (11%). Nearly half of all falls (48%) occurred in the home, with a further 18% occurring in a sports place, 11% at a recreational place, and 10% at school/ childcare or other public administration area. Alcohol being consumed by another person was found to double the risk of high falls.

Injury-related presentations due to **being struck by a person** were particularly common among adolescents and young adults, accounting for 28% of all presentations among 15-34 year olds (Table A3.3). The vast majority of these injuries (80%) occurred during leisure activities and sport. Of the leisure-related events, 52% were recorded as involving the victim's consumption of alcohol, and 33% involved alcohol consumption by another person.

Injury-related presentations due to **cutting and piercing** were most common among children (accounting for 13% of presentations among children aged 5-14 years), and adolescents and young adults (accounting for 14% of presentations in the 15-34 year age group) (Table A3.3). While the majority of cutting and piercing injuries (65%) were accidental, 21% were recorded as being due to self-harm and 6% due to assault.

FIGURE 2:
Injury-related SDMH Emergency Department presentations, by cause, 1999



Overall, 73% of all injuries leading to ED presentation were recorded as accidental, with 13% recorded as assault and 8% as intentional self-harm (Figure 3, Table A3.4). Alcohol was found to increase the risk of assault by 50% if consumed by self (i.e. the injured person) and 200% if consumed by others. (It should be noted that involvement of drugs or alcohol was only recorded as `Yes' in the ED case notes review if this was clearly documented in the clinical notes. It is well known that clinical notes often lack sufficient reference to causal factors, including drug and alcohol use).

The pattern of **intent** behind the injuries for males and females were similar, except that a higher proportion of injuries among males were due to self-harm (9% versus 5% for females), and among females were due to maltreatment by a partner or parent (3% versus 0 for males).

About half of all injury-related ED presentations were associated with **leisure activities**, with a further 13% being associated with **sport**, and 10% with **being nursed/ cared for** (Figure 4, Table A3.5). W**ork activities** accounted for 9% of all injury-related presentations (5% paid work, 4% other work). Leisure was the commonest activity associated with injuries across all age groups (except for 0-4 year olds for whom leisure ranked second) (Table A3.4). **Sports** injuries were also common among older children (accounting for 12% of presentations among 5-14 year olds), and adolescents and young adults (accounting for 21% among 15-34 year olds). The most common activity associated with injury in 0-4 year olds was being nursed/ cared for, which accounted for 52% of all injury-related presentations in this age group (Table A3.5).

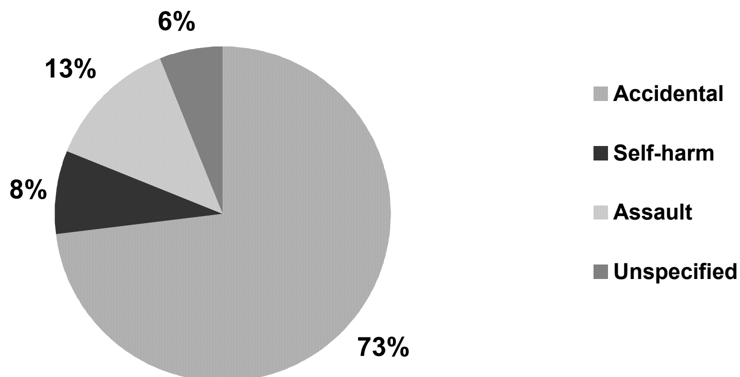
The **home** was the most common place of injury for people in all age groups, with 45% of all injuries leading to ED presentation occurring in the home (Figure 5, Table A3.6). The home was a particularly common place of injury among children (accounting for 78% among 0-4 year olds and 56% among 5-14 year olds), and older people. Injuries occurring at **sports places** ranked second (accounting for 12% of all injury-related presentations), and were particularly common among adolescents and young adults. For children aged 5-14 years, injuries also commonly occurred at **schools**, while for adolescents and young adults**, other recreational places** and the **road** were common places for injury events (Table A3.6).

Another valuable piece of information obtained from the ED case notes review, concerns the **seriousness** of the injury which led to ED presentation. While clearly not all of these injuries would be conside red serious, in 1999 27% were triaged as (at least) `urgent' (triage categories 1-3, requiring treatment within 30 minutes), with a further 17% being considered `semi-urgent' (requiring treatment within 60 minutes) (Figure 6).

The activities and causes associated with the urgent cases are shown in Table 6. It is clear than many of the injuries associated with falls and being struck by a person are far from trivial. When underlying intent is considered, it is also clear that many of the

more serious injuries are linked to self-harm and violence. Notably 28% of injuries leading to ED presentation among children and 31% among adolescents were triaged as at least urgent. Summary profiles of **childhood** and **adolescent** injuries are shown in Tables 7 and 8.

FIGURE 3:



Injury-related SDMH Emergency Department presentations, by intent, 199914

FIGURE 4:
Injury-related SDMH Emergency Department presentations, by activity at time of injury, 1999

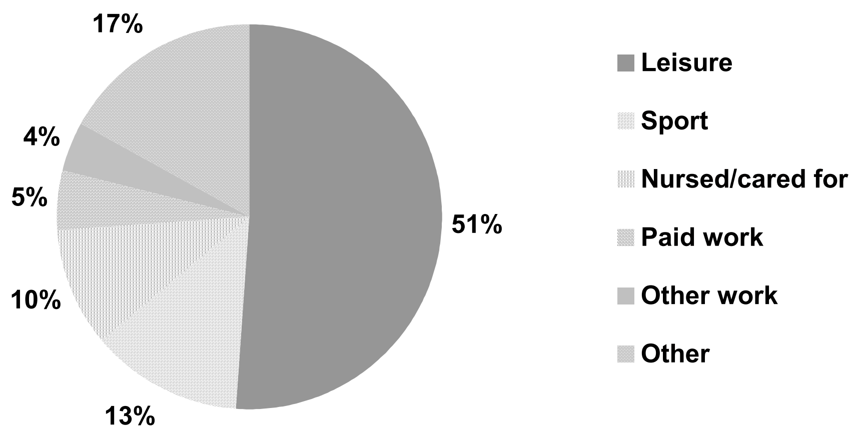


FIGURE 5:
Injury-related SDMH Emergency Department presentations, by place of occurrence, 1999

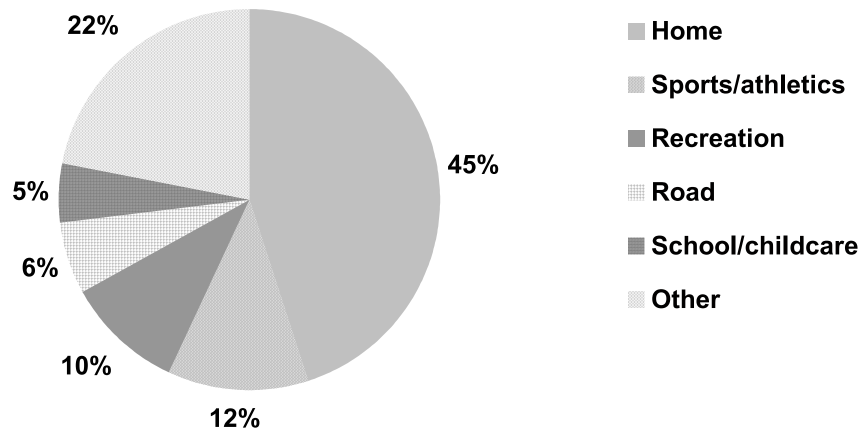


FIGURE 6:
Seriousness of injury (triage category) among indigenous people presenting to SDMH Emergency Department, 1999

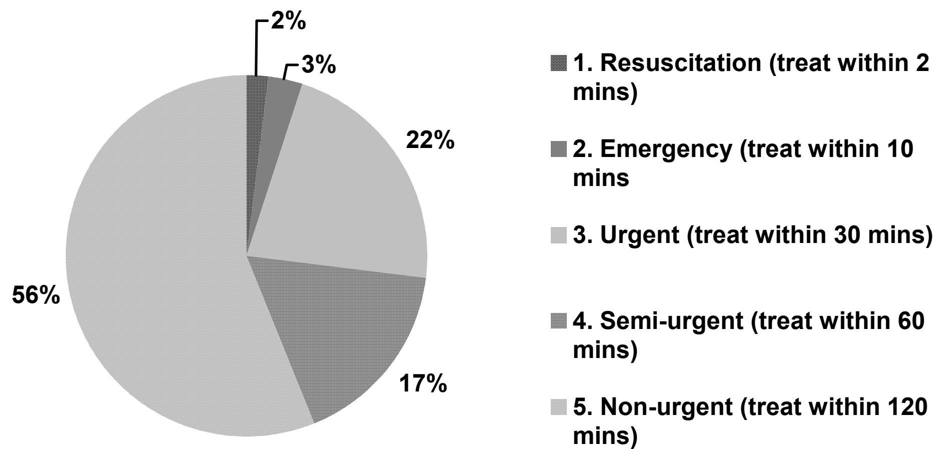


TABLE 6:
Activities and causes associated with more serious injuries (triage categories 1-3) among indigenous people presenting to SDMH Emergency Department, 1999

		Percent
Cause	Struck by person	18%
	Fall - high	15%
	Fall - low less than 1m	11%
	Poisoning	10%
	Motor vehicle passenger	6%
	Cutting and piercing	6%
Activity	Leisure	51%
	Nursed / cared for	15%
	Sport	10%

TABLE 7:
Injuries among indigenous children presenting to SDMH Emergency Department, 1999

		Percent
Cause	Fall – low	25%
	Fall – high	17%
	Cutting and piercing	11%
Activity	Leisure	57%
	Nursed/ cared for	26%
Triage	Serious (triage category 1-3)	28%

TABLE 8:
Injuries among indigenous adolescents presenting to SDMH Emergency Department, 1999

		Percent
Cause	Struck by person	30%
	Fall low	18%
	Cutting and piercing	13%
Activity	Leisure	52%
	Sport	24%
Intent	Accidental	60%
	Self-harm Assault	13% 20%
Trauma	Sprain/ strain	29%
	Open wound/ cut	26%
	Concussion	10%
Sex	Males	73%
	Females	27%
Triage	Serious (triage category 1-3)	31%

Responses from the interviews and focus groups relating to the causes and circumstances of injury again tended to show a high degree of consistency with the ED case notes data, and across the different demographic groups who participated. In the interviews and focus groups, the main prompts used relating to the causes and circumstances of injury concerned:

- Who - men/ women? children/ young adults/ adults/ older people? people living in Nowra & suburbs/ outside Nowra & suburbs? other groups at risk?
- Where and how - places of injury? activity at time of injury? intentional/ unintentional?
- What happened then - access to treatment etc?

Responses from the focus group discussions and interviews emphasised the common involvement of alcohol and other drugs, directly and indirectly, in both intentional (e.g. assault) and unintentional (e.g. falls) injuries. Common themes which emerged about the underlying causal factors concerned low self-esteem and a `normalisation' of drug and alcohol abuse and interpersonal violence within communities (see Section 3.4).

Both assault and self-harm injuries were reported to be commonly associated with drug and/ or alcohol use. Initial responses by many participants in the focus groups and interviews concerned the clear relationship between alcohol and interpersonal violence, particularly in the home situation.

Home-based unintentional injuries (i.e. of accidental intent) to young children were also reported by many respondents to commonly involve alcohol and other drug use by supervising adults. This response typically followed a prompt relating to the apparently high rate of injuries in the home among 0-4 year olds, as suggested by the SDMH ED case notes data.

In terms of the direct involvement of alcohol and other drugs in ED presentations, `alcoholic' poisonings and non-prescription drug overdoses were also discussed by a number of respondents.

Various effects of chronic (or long term) alcohol and other drug use were also a concern to many respondents. These effects included various associated medical conditions, acquired brain injury, as well as poisonings, assaults and self-harm.

The ED case notes data certainly support the perceptions of focus group and interview respondents about the importance of injuries associated with `acute' alcohol and other drug use. Concerns expressed in the focus groups and interviews about the effects of `chronic' alcohol and other drug use provides a valuable additional perspective. This is further discussed later in this document in terms of the effects of injury on communities.

In summary, the combined findings of the ED case notes review and interviews and focus groups show that:

- Many injuries are **serious**.
- **Self-harm** and **interpersonal violence** are common, of great concern to the community, and are often associated with drug and alcohol use. As with all injuries, males in particular are at risk.
- The majority of injuries occur in the **home**, particularly among young children. In this context, falls and concussion are common.
- **Leisure activities** and **sport** are a major source of injury, particularly among children, and young people. These activities accounted for 73% of falls injuries and 80% of injuries involving being struck by another person. They result in sprains, strains and fractures. Alcohol, often not by the injured party, contributes significantly to leisure and sports injuries.

What sort of effect do you think these injuries have on the people injured, their families and communities?

Responses to this question tended to focus on the social, emotional and economic impacts of injuries on individuals, their families and communities. Most people interviewed, recognised the relationship between the severity and impact of the injury. Responses to this question included:

- **Increased Stress**
  The most commonly reported 'impact of injury' was increased stress on individuals, their families and communities. Many people interviewed suggested a link between experiencing a debilitating injury and a reduction in self-esteem and confidence in one's own abilities. This was frequently reported as taking the form of feelings of increased frustration and anger with their situation. This tended to have a 'ripple' effect throughout the families and communities of the injured individual. Many people acknowledged the connection between serious injury, reduced physical function, and loss of role and identity within the family and community. This was often seen as a precursor to the onset of more serious psycho-emotional problems for the individual, such as depression, feelings of hopelessness, self-harm and suicidal ideation, and often erosion of family systems.

- **Increased Financial Pressure**
  This was most likely to result from unforeseen medical and treatment costs, reduced ability to perform work duties and hence a perceived decrease in future employment opportunities. This response was generally linked with responses relating to increased stress on individuals, families and communities.

- **Increased Use of Alcohol and Non-Prescription Drugs**
  Various reasons were given for this common response, including boredom, more leisure time, pain reduction, and emotional stress associated with injury.

How do you think injuries among indigenous people in the Shoalhaven can be reduced?

Responses to this question tended to receive the most discussion time during both the semi-structured interviews and the focus groups. This question also tended to evoke the greatest diversity of responses. Suggested injury prevention strategies were often quite specific to the community membership, age and gender of the participants. Common themes, and examples of specific suggestions, which emerged from responses to this question included:

- **Culturally Appropriate Health Promotion Campaigns**
  These campaigns would aim to raise awareness among, and inform, indigenous people about identification of injury 'risk factors', injury prevention strategies and injury management. This was a common theme among both male and female respondents, particularly those living in communities outlying the major urban centres. Emphasis was placed on the need to train more indigenous people in Health Promotion. Aboriginal Health Education Officers were seen as a vital part of this process.

  "We need to see more Koori faces in positive health promotion roles".

- **Positive Indigenous Family Systems**
  Many respondents referred widely to the impact of violence, drug and alcohol use and consequent injuries on the erosion of the indigenous family unit. The need for strategies to support the maintenance and development of positive indigenous family systems was emphasised.

- **Focus on Children, Adolescents and Young Adults**
  Injury prevention programs targeting children, adolescents, young adults and parents of young children were particularly emphasised. Most informants considered drug and alcohol education as the most important means by which injuries among indigenous people could be reduced.

  "Young Kooris are starting to drink grog and take drugs from a younger age, sometimes around eleven or twelve." "We need to educate the younger ones now before it (grog) gets a hold of them."

Positive Alternatives to Drug and Alcohol Use
Many respondents discussed the need for positive alternatives to drug and alcohol use within their communities. Suggestions included: development of Healthy Lifestyle programs (e.g. which utilised indigenous role models); more sport and recreational facilities; and activities aimed at developing a positive cultural identity (including the teaching of traditional laws and practices, developing respect for and accessing the wisdom of Aboriginal elders).

- **Sports Injury Prevention**
  Increased awareness about sports injury prevention was another common response, particularly among males and females in the 10 to 25 years age group. Again, this response was often qualified by the need for indigenous people to be involved in the education of other indigenous people.

- **Occupational Health and Safety**
  Many respondents identified a need for greater awareness within indigenous communities about occupational health and safety in both the workplace and home. Access to adequate safety and protective equipment was identified as a major issue.

- **Other Safe Indigenous Home and Community initiatives**
  Other suggestions included provision of safe childcare facilities, identification of community safe houses, and implementation of traditional law and sentencing options.

Suggested strategies or actions to address these identified needs are outlined in Section 4.

3.4 Making Sense of Injury Patterns and Setting Priorities

What do the injury patterns mean for indigenous people?

In line with the indigenous holistic view of health and well-being, injury is one issue intertwined with many others. It is both cause and effect. The stresses and pressures on indigenous life increase the risk of injury, and injury in turn increases the stresses. Alcohol consumption is both a cause of injury, especially due to violence, and is also often at least partially a result of past injuries that have placed pressure on individuals and their communities. Importantly, people who participated in this phase of the project indicated that they were keen to implement injury prevention strategies and saw such a program as an opportunity to break the injury cycle, and hence demonstrate real differences in their communities within a few years.

Many of the case studies identified common themes in terms of the causal factors leading to the injury and the post-injury experiences. Some of the common themes were:

- **Reluctance to Access Treatment**
  Many participants spoke about a reluctance to access medical treatment immediately after sustaining an injury or following initial treatment by a General Practitioner or the Emergency Department when a referral was made. Factors contributing to this reluctance included: financial constraints, lack of transport, previous negative experiences with health care providers, feelings of shame and guilt, and fear of legal ramifications. The subsequent delay in receiving medical attention and follow-up can prevent optimal healing of the injury, which can then result in a greater impact on the individual and their support network.

- **Low Self-Esteem**
  Another common theme conveyed by interview and focus group respondents was the notion that many indigenous people experience low self-esteem. This was regarded by many as a critical factor underlying why indigenous people have a high rate of injury. As discussed above, shame also served as a powerful barrier to accessing formal health care services.

  "What they (young Kooris) need is to get a job, so their self-esteem is up. They need to get their confidence."

  "Injuries come from not looking after yourself."

- **Normalisation of Drug and Alcohol Abuse and Interpersonal Violence**
  This was another common concern expressed throughout the responses made by different members of the local indigenous communities.

"Kids grow up seeing adults chargin' up and fighting all the time. They just accept this as a normal part of life."

A selection of comments, quotes and injury event narratives, has been reproduced in this section, as examples of the thoughts and experiences of many of the people interviewed. It should be noted that information identifying individuals and communities has been intentionally omitted in order to protect the confidentiality of people and communities. First names and ages appearing with each excerpt or quotation are fictitious and are intended to just inform the reader as to the gender and age group of the respondent.

About February 1998, four mates (all males – aged 15, 18, 20, 21 years) and me were returning from Kings Cross, Sydney. At approximately 22:30, while attempting to overtake a vehicle on the highway, the driver lost control of the vehicle, which spun around several times and hit a tree. All occupants of the vehicle were able to get free and walk from scene. All of us were in shock. Police arrived at the scene shortly afterwards, the driver and the owner of the car were arrested. The rest of the occupants were allowed to catch the train home. All occupants had been drinking port since the day before. No other drugs were consumed. I'm glad we had our seat belts on. The tree hit the door on my side of the car. I felt the impact more than anyone in the car. An hour later while on the train, I felt a dull ache in my lower back. When we got back, we all hit the piss hard because we were all still in shock. I've never seen a doctor or anything about it. I still feel pain and that, especially at night or when it's cold. I think I should go and get it checked out. – Daniel, 19.

It was the afternoon of the rugby league Grand Final (Sunday). I was having a few drinks with some of my mates. I decided to jump the fence to get to the backyard. On landing on the other side, I twisted my right knee, landing heavily. I went down straight away. Because I had a few beers that afternoon, I didn't feel it as much as I should have. I didn't bother going to the hospital. When I woke up the next morning, my knee was very swollen and painful. I was unable to walk or weight bear. I didn't end up going to hospital till Tuesday afternoon. At hospital, my leg was totally bandaged, I was given pain-killers and referred to a knee specialist in Wollongong. I still haven't been to the Specialist because of a combination of lack of money and transport. Just being slack. You know, just being a man, one of those macho things. – Gary, 36.

My husband's been off the grog for a long while now and I'm glad of it. He used to come home charged up and take his frustrations out on me and the kids. I left him a few times, but really, we didn't have anywhere to go, you know, other than sleeping on the floor at a few different relatives places for a short time. He'd be O.K for a while, then he'd go on a drinkin' binge and it would start all over again. It was like he was a different person. Anyhow, I think it was after the death of his last mate that it hit home to him that all of his drinking buddies were either suffering from some chronic condition or dead. - Doreen, 47.

About seven years ago, my 3-year-old son was running in the lounge room where he tripped and fell against the corner of the lounge chair. He hit his right cheekbone causing a large laceration. We took him by car to our local GP (who had a locum filling in for him). The doctor began to apply sutures (without antiseptic or a local anaesthetic). My husband stated that he was not to proceed. We then took him (son) to the local Medical Centre, where he received treatment (including antiseptic and anaesthetic). He had about 8 – 10 sutures. He made a complete recovery with very little obvious scarring. – Shelley, 38.

About two months ago, we were playing touch football at the local playing fields (6pm, Monday night). I stretched for approximately 5 minutes prior to the game. Late in the second half, I had the ball and was running for the try line. I went down heavily on both knees in order to score a try; I felt a sharp pain immediately in my right knee, which also began to swell straight away. I was unable to continue playing. The ground was very hard (particularly the southern end). I saw the visiting GP the next day. He prescribed an anti- inflammatory. He stated that I could go for an arthroscopy for further investigation but I declined, due to parenting commitments and financial constraints. My knee still clicks from time to time, and occasionally still hurts. - Amanda, 22.

In February 1994, I went to the beach with my rugby team, trainer and coach to do some strengthening exercises in the water prior to playing football the next day. I walked into the water about waist deep and dived forward. At that moment, the water went out and I dove headfirst into a sandbank. Straight away blood started pouring out of the top of my head and I felt a sharp shooting pain starting at my right ear and extending down the right side of my body. I lost consciousness for a few seconds. I staggered back to the beach and collapsed onto the sand. I couldn't think straight. I knew I was stuffed. I couldn't talk properly because I had done damage to all the muscles in my jaw. No one knew what to do. Someone said not to move me. I couldn't move my head or

anything. I eventually got up and walked to the bus and asked to go to the hospital. They ended up bringing me home where my mum and grandmother drove me to the hospital. They took a couple of x-rays and treated me for concussion. Later I found out that my collarbone was thrown out of alignment and I had badly pulled all the muscles in my neck. I went for a few check-ups with my GP afterwards. It (my neck/collarbone/back) has never been the same since. – Matt, 21

About three years ago, me and a mate had been sippin' up down the bush. We decided to do a B and E (break and enter) on a holiday house around here that we knew was empty. We broke a window to get in. While we were in the house, someone must have called the 'Gungies' (Police), because they turned up. Well, we both scrambled out the window as fast as we could, I must have cut my hand on the glass as I climbed out. We then took off into the nearby bush. From here, we split up. My heart was pounding, I ran, for what seemed like ages, until I final collapsed onto the ground. It was only then that I noticed the cut on my hand. It was a deep gash, which ran right across the palm of my hand. I had lost a lot of blood. I made my way to my sister's place where she cleaned up my hand and put a bandage on it. I knew it needed stitches but I couldn't afford to get busted by the 'Gungies'. I haven't got full strength in this hand any more and have problems doing a lot of things with it. - Jason, 18.

About 12 years ago, I was living in Sydney and I was returning home from visiting my aunty. It had been raining earlier. I was walking down my front path (which was tiled) when I slipped and fell heavily. On trying to get up on my left leg I slipped and fell again on to my right hip and arm. I didn't feel pain until I tried to stand up and walk. I felt a throbbing pain coming from my ankle and shooting up my right leg. I had to crawl along the verandah into the house where my husband assisted me into the lounge room. I went to bed (taking a couple of aspirin). Later when I tried to go to the toilet, I realised I could not walk. My husband transported me to the local hospital where I had an x-ray and I was diagnosed with a fractured ankle. Treatment included pain-killers and a plaster cast. I had to wear the cast for four months. I was required to go for follow-up treatment and was replastered twice. My ankle still plays up on me from time to time. It constantly aches and swells up, especially after being on my feet for any length of time. - Edith, 55.

About 18 months ago, I was playing Rugby League. Just before full time, I made a cover tackle on an opposition player. My forearm collected him across the head as we both went down in the tackle. Straight away, I heard a big crack, like a whip going off. I walked straight off the field and sat down in the car. My arm was throbbing with pain. My old man took me straight to hospital. Here they asked for my details (including Aboriginality). I waited about half an hour before a doctor saw me, sent me for an x-ray and applied a plaster cast. I was told that I had a compound fracture to my forearm. I was referred to Wollongong for surgery on my arm for the following day. The next day, my dad drove me to Wollongong Hospital where I stayed for three days. I had a steel plate inserted with seven screws. I was required to get it checked and x-rayed 4–5 weeks later. I was told that it was healing all right. The specialist stated the incision was a pretty messy job. I was given the option to get the plate and the screws removed. After discussing it with my old man, I decided to leave them in. While I was injured, I went on to sickness benefits as I was unable to work in my normal job. I felt pretty useless and ended up hitting the grog and the yarndi (marijuana) pretty heavily. – Robert, 20.

Blackfellas are brought up to play (footie) hard. Lots of blackfella's don't get injuries properly attended to, not letting injuries heal properly. – Dennis, 29.

While operating a chainsaw at work, I was standing on a log cutting rounds of firewood when the log moved and knocked me on the inside of the right knee. I was wearing all the safety gear (including chaps, helmet, visor, earmuffs, ear plugs). The knee was swollen and sore for about 3 days. I didn't take any time off work. I documented the injury in my diary, but I didn't get any treatment for it. The knee still gives me grief, but I can't afford to stop working, there are too many people at home relying on me. – Geoff, 42.

About two months ago, my eldest son (4 years old) was running around inside the house. I was in the kitchen, cooking dinner, when he ran in to me crying. He had burnt three fingers and his left shoulder on the flue of the slow combustion heater in the lounge room. He had tried to squeeze between the stove and the wall. I had to take him (and the other kids) to a relative's place.

Here, we called a taxi and me and my son got a lift down to our local doctor. The doctor only put one patch on the shoulder wound, then sent us home. A few days later, the wounds became badly infected. I got a lift down to the hospital with my son. He had to stay in hospital for three days because the wounds were so badly infected. After this, he was sent home with a good supply of antiseptic cream and dressings. – Beth, 22

Different Communities, Different Issues

Throughout the indigenous communities within the Shoalhaven region, many common themes emerged from people's thoughts and ideas about injury causes and prevention. However, some issues - related mainly to the physical environment and/ or access to services - tended to be quite specific to particular communities and/ or sub-regions:

- **Physical Environment**
  Injury patterns at least partly reflect physical environments, and the physical environment varies considerably throughout the Shoalhaven region. For example, a community situated next to the ocean tends to have more injuries relating to activities involved in interacting with this feature of their environment, than a community, for instance, situated inland.

  Participants in the interviews and focus groups identified numerous hazards in both the natural and built environments within their communities. These are often isolated to specific communities while others tend to occur across a number of communities. Hazards identified in the built environment included: incomplete/ faulty housing construction and maintenance; inadequate waste disposal; smashed glass; faulty playground equipment; unrestrained dogs; proximity to highways. Hazards in the natural environment concerned proximity to natural features, such as rivers, the ocean, cliffs and headlands, and the bush (e.g. threat of fire).

  > *In summer, lots of people out here get cut up feet, mainly from oysters and glass, especially the kids. - Mick, 34.*
  >
  > *A big worry of mine is the younger kids playing in the water. Sometimes they are not supervised or only supervised by older kids, who tend to run amuck and forget about the little ones. - Elizabeth, 43.*
  >
  > *It's a bit scary to think that we are surrounded by so much bush, yet we have next to no fire-fighting equipment or even a plan of what to do if a fire does break out. - Bill, 47.*
  >
  > *Most of the houses out here are in serious need of repair or completion. A lot of the injuries which do happen are because of this. For example, my aunty's house has no handrails for the front steps or porch and people are always falling down them, especially when they've been chargin' up. – Jim, 23.*

- **Access to Services**
  Communities located within and near to the urban areas, experience markedly different issues in terms of transport and access to services as compared to outlying communities.

  > *It was Sunday afternoon, I was sitting around, having a few drinks and minding my own business when two Koori lads pulled up in a car. They both got out of the car and began calling me names. Then one of them knocked me to the ground and they both started putting the boot in. I had blood pissing out of my head. A mate came running up and the two lads jumped into the car and pissed off. I haven't seen them again since. I went down to my cousin's and cleaned myself up. My face was badly swollen and cut up. I didn't get any medical treatment because I couldn't get there. Most people out here don't have a phone on, let alone a car - Jacko, 39.*

Priority Areas For Action

Based on the qualitative and quantitative information collected for this project a clearer picture of the issues relating to injury prevention among indigenous people in the Shoalhaven has emerged. Key areas for preventative intervention are identified below, which are expanded further in terms of short term and long term actions in Section 4. The priority areas do not exist as distinct entities, but rather merge and overlap to create a complex and interrelated reality for the indigenous people of the Shoalhaven:

1. Indigenous Injury Surveillance

Without the information collected specifically for this project, the only routinely available information related to indigenous injury in the Shoalhaven comprises routine hospital (administrative) data, as summarised in Section 2. These data are extremely limited for a number of reasons, including:

- The poor recording of indigenous status means that the magnitude of the injury problem among indigenous people in the Shoalhaven is considerably underestimated, and the picture of patterns of types of injury etc is also likely to be greatly distorted.
- While information relating to the cause of injury (E codes) is recorded for hospital separations, hospital separations represent only the tip of the iceberg of injuries among indigenous people.
- While Emergency Department presentations (which may or may not lead to hospitalisation) represent a more significant part of the injury `iceberg', Shoalhaven hospitals (in fact all IAHS hospitals) currently do not collect information related to the cause of injury in the optional `injury module' within the Emergency Department Information System (EDIS). `Real time' data collected via the EDIS injury module would be more complete (and certainly more timely, accessible and useful) than the information obtained from retrospective review of medical files, which was done using resources specifically available for this project.

2. Access to Services

Barriers to access reported by many of the respondents included: financial; lack of transport and geographic isolation; lack of telephone connection to services/ transport; own or others' prior bad experiences with health services; shame and guilt related to the circumstances of injury and/ or prior interaction with health services; fear of legal ramifications; and lack of awareness of availability of services. While for many years service providers in the Shoalhaven have attempted to overcome many of these barriers to access to services, significant issues still exist for many indigenous people.

3. Home-Based Injuries, Particularly Among Children

Most injuries among Shoalhaven indigenous people - in all age groups - occur in the home. This is particularly the case for young children - in 1999 78% of injuries among 0-4 year olds occurred at home. Predisposing factors for home-based injuries identified by respondents included: over-crowding; incomplete/ faulty housing construction and maintenance; and inadequate supervision of children particularly related to drug and alcohol use.

4. Leisure and Sports Injuries, Particularly 10-25 Year Olds

Leisure activities, followed by sport, were the commonest activities associated with injury among Shoalhaven indigenous people presenting to the Emergency Department in 1999. Leisure and sports injuries were particularly common among children and young people, and often involved alcohol. In addition, respondents identified rugby league players (generally males aged 15-30 years) as a group at high risk of injury.

5. Drug and Alcohol-Related Injuries, Particularly Among 15-35 Year Old Males

Drug use, particularly alcohol, was the most commonly reported contributing factor to injury. While a wide range of injuries appear to be related to alcohol and drug use, respondents mentioned interpersonal violence, falls and poisonings in particular. The quantitative data also showed a strong relationship between alcohol use and injury. For example, an analysis of the ED case notes data showed that alcohol use increased the risk of assault by 50% if consumed by self (i.e. the injured person), and by 200% if consumed by others.

6. Injuries Resulting from Interpersonal Violence and Self-Harm

Given responses to the interviews and focus groups, the significance of interpersonal violence and self-harm in Shoalhaven indigenous communities cannot be understated. Interpersonal violence appears to be occurring in almost all aspects of indigenous life, and is often associated with drug and alcohol use as discussed above. The importance of intentional injuries was also reflected in the quantitative data, with assault and self-harm accounting for 13% and 8% of all injury-related ED presentations, respectively, in 1999, and `being struck by a person' accounting for 28% among 15-34 year olds. Many of these injuries are serious - for example in 1996/97-1997/98 self-harm and interpersonal violence were the commonest causes of injury-related hospitalisations among indigenous Shoalhaven females. A particular concern expressed by many of the respondents was that interpersonal violence and drug and alcohol abuse have become `normalised' within indigenous communities, i.e. accepted as a `normal' part of life.

7. Work-Related Injuries, Particularly 15-65 Year Olds

The ED case notes data showed that work activities (paid and other) were associated with 18% of all injury-related ED presentations among people aged 15 years and over in 1999. Many respondents identified a lack of awareness about occupational health and safety, and lack of access to appropriate equipment, as significant issues for indigenous communities.

8. Positive Development of Individual, Community and Cultural Identity

The notion that many young indigenous people have little or no self-respect, appears to be related to a lack of respect for family, community and cultural values, and in turn, the high occurrence of injury in indigenous communities. The importance of positive personal and community development for indigenous people, particularly children and young people, was a common theme which emerged during the interviews and focus groups. The negative impact of injury - and the associated violence and drug and alcohol use - on the individual, the family unit and communities, only serves to perpetuate the injury cycle.

4. Making a Difference

Identification of injury patterns and issues relating to injury prevention and management only goes part of the way towards resolving the issues. A **co-ordinated approach** is required in order to bring about positive change to this complex interaction of individual, community and societal factors. The relationship between an individual's behaviour and their environment – physical, cultural and social - cannot be understated. In considering this relationship, preventative strategies must have meaning for the individuals and be delivered in an **appropriate environmental context**. In addition, proposed strategies should have **measurable indicators of success**, be regularly evaluated and have the capacity for modification.

With these principles in mind, both short term and long term actions have been identified, aimed at reducing the occurrence and impact of injury on indigenous communities in the Shoalhaven and ultimately creating safe indigenous communities.

As stated in the Manifesto for Safe Communities, developed from the First World Conference on Accident and Injury Prevention in 1989:

> *"It is imperative that research and demonstrations for injury prevention and control should involve community programs for prevention. These interventions must reveal how best to achieve safe communities in an efficient manner."* And further,
>
> *"People have a right, and some would say a duty, to participate individually and collectively in the planning and implementation of their communities' safety work. They should make full use of local, national and other available resources."*

Reflecting these principles, and the voices of Shoalhaven indigenous people expressed during the interviews, focus groups and community consultations, the common elements or principles which underlie the proposed injury prevention programs and activities, include:

- Provision of injury prevention promotional material, programs and activities in a **culturally appropriate** context.
- **Community control and ownership** of injury prevention activities, **involvement of local people** at all levels being critical to the success of such activities.

- Structuring activities in ways which encourage **positive self-esteem and confidence** in **individuals, families, communities, and at a cultural level**.

- Application of a **clear process** in terms of **identifying issues, developing strategies, adopting community-owned solutions** and **evaluating outcomes**.

- Harnessing and **coordinating** the **collective expertise and resources** of all relevant agencies, government and community-based, across all relevant **sectors**, e.g. health, housing, education etc, into an effective **partnership** approach to injury prevention.

4.1 Short Term Actions

1. Indigenous Injury Surveillance

To gain an accurate picture of injury in Shoalhaven indigenous communities, to devise and target injury prevention strategies accordingly, and to review progress and evaluate success, much better information about injury occurrence and causes is required. In particular, the depth, scope, timeliness and accessibility of indigenous injury surveillance information require improvement. The following strategies are proposed to enhance existing injury data collection methods at a local level:

- Implementing the injury module in EDIS at the Shoalhaven Hospital Emergency Department (and other IAHS ED), including in-house training for front-line Emergency Department staff about collecting the injury causation details.

- In-house training of front-line staff about the importance of, and how to improve, the recording of indigenous status in EDIS (and the Inpatients Statistics Collection).

- Regular quality audits (or validation studies) to monitor progress in improving the recording of indigenous status in routine hospital data collections.

- Incorporation of injury data collection into the role of clinicians, Aboriginal Health Workers and community nurses (e.g. within Aboriginal communities at Wreck Bay and Jerringa).

2. Access to Services

A concerted effort is required in order to address the range of access issues, for example through the following strategies:

- Promotion of services in a culturally appropriate manner, for example: locally produced promotional material (e.g. flyers, posters, brochures and videos); utilising existing, and employing more, indigenous staff in local services; ongoing community-based training/ education/ workshops; regular community consultations; and outreach services.

- Enhancing logistical support, for example: development of outreach services in communities where transport is an issue, and/ or provision of transport in specific circumstances.

- Ensuring services and service providers are culturally aware and culturally appropriate.

3. Safe Home Environments

Suggested strategies to promote safe home environments are as follows:

- Education and promotion relating to safety in the home, particularly targeting parents of young children and older people.

- Hazard identification and minimisation within the home, for example: promotion of home safety checklists; provision of training in home maintenance and proper use of safety and protective equipment; installation of hard-wired smoke alarms and earth-leakage detectors; implementation of NSW Health's `Housing for Health' program in indigenous communities of the Shoalhaven.

- Drug and alcohol strategies (see below).

Sports Injury Prevention

Suggested strategies for sports injury prevention are as follows:

- Provision of culturally appropriate education and training in sports injury prevention, targeting existing sports clubs and associations.

- Promotion of safety techniques, including exercise and equipment, within indigenous communities and with local sports clubs and associations.

- Creating safer sports environments such as grounds and fences.

- Improving access to immediate treatment of sports injuries to reduce complications.

4. Drug and Alcohol Strategies

Suggested strategies to reduce the impact of drug and alcohol abuse are as follows:

- Provision of culturally appropriate drug and alcohol education programs for indigenous school-aged children and adolescents.

- Promotion of healthy lifestyles and positive alternatives to drug and alcohol use, for example: development of Healthy Lifestyle programs (e.g. utilising indigenous role models); more sport and recreational facilities; and activities aimed at developing a positive cultural identity (including the teaching of traditional laws and practices, developing respect for and accessing the wisdom of Aboriginal elders).

- Placing very high priority (and corresponding urgency) on implementing Illawarra Drug Summit initiatives targeting indigenous people.

- Ensuring drug and alcohol strategies are coordinated across agencies, including through maintaining close liaison between drug and alcohol workers and programs.

- Ensuring issues arising from drug and alcohol use relating to child protection, child safety and domestic violence are addressed appropriately.

5. Occupational Health and Safety

Suggested strategies to reduce work-related injuries - during paid and unpaid work - are as follows:

- Development and implementation of culturally appropriate Occupational Health and Safety training packages, perhaps through sponsorship of major employer organisations.

- Improving access to adequate safety and protective equipment, at work and within homes/ communities.

6. Other Community-Based Injury Prevention Strategies

Other suggested community-based strategies to reduce indigenous injury in the Shoalhaven include:

- Ensuring the provision of safe childcare facilities (formal and informal) within indigenous communities.
- Provision of training and promotion in positive parenting (for adolescents, young adults, and parents).
- Provision of 'safe houses' on indigenous communities for people 'at risk' of injury.
- Promoting bike/ pedestrian/ scooter/ road safety among children and parents.
- Implementing driver education/ road safety programs within indigenous communities.
- Promoting water safety, targeting children and their parents, e.g. through Safe Swimmers campaigns.
- Increasing sport/ recreation options for children and young people, e.g. enhanced community-based recreational facilities, structured after-school and holiday programs (with cultural awareness programs for organisers and managers of activities, and employment of indigenous staff).
- Increasing access to youth counselling services.
- Increasing access to personal development education, particularly for children and young people, relating to development of positive self esteem, assertiveness, communication, and conflict resolution.
- Promoting cultural awareness, including positive cultural identity and respect for elders, traditions and customs, ensuring elders have appropriate input into community and cultural development.
- Increasing employment and training programs/ opportunities.
- Implementing falls prevention and safe homes programs targeting people aged 55 years and over.
- Developing local support networks for people aged 55 years and over.

4.2 Long Term Actions

1. Development of the Infrastructure in Existing Indigenous Communities

The development of meaningful community-based activities and initiatives requires the existence of a suitable infrastructure to support positive community development.

Land and Community Councils have an existing infrastructure which should be used as a reference base for any proposed community initiatives. **Management Committees** are well placed within communities to promote and develop these activities at a local level.

Sub-committees or **working parties** would allow interested individuals to focus on addressing issues faced by specific groups within their communities, for example: child safety, youth development, occupational health and safety, cultural awareness and elders groups. The sub-committees would assist with the practical implementation of injury prevention strategies, as well as the evaluation of such activities. Specific sub-committees would be able to organise ongoing education forums and community consultations within their identified areas, thus strengthening the link between Management Committees, community members and the wider community.

Where possible, **training** in effective committee management should be offered. In addition, representation on the sub-committees by related external agencies could be considered. For example, Early Childhood Nurses from the Illawarra Area Health Service could be involved in a child safety sub-committee which is developing community-based child safety initiatives.

Provision of **funding** is also critical to the development of the necessary infrastructure. Potential funding bodies should be approached to consider the allocation of resources into programs which aim to establish and develop sustainable community-driven injury prevention initiatives for the indigenous people of the Shoalhaven.

2. Shoalhaven Safe Indigenous Communities Initiative

Discussions with key Shoalhaven indigenous community leaders have indicated a high degree of support for the development of a Safe Indigenous Communities Initiative. Central to the development of this initiative is the promotion of the right that all people should be able to feel safe in their own homes and communities.

The fundamental concept behind `Safe Communities' promoted by the World Health Organisation, and consequently many countries overseas, and recently by our Commonwealth and NSW governments, is that **community involvement, ownership and control** are integral to the success of programs aimed at reducing the burden of injuries in communities.

Maintaining injury prevention issues at a local level reduces the strain on wider community resources while empowering community members to assert more control over their lives. Community-based approaches to injury prevention tend to be far more in tune with community needs, issues and potential solutions. Development of effective **feedback mechanisms** is a cornerstone of any successful community-based injury prevention strategy.

Key representatives from the following organisations and agencies have expressed support for this proposal: NSW Health, Illawarra Area Health Service (Aboriginal Health), South Coast Medical Service Aboriginal Corporation, Waminda South Coast Women's Health and Welfare Aboriginal Corporation, NSW Aboriginal Lands Council, Nowra Lands Council, Jerringa Lands Council, Wreck Bay Aboriginal Community Council, NSW Aboriginal Housing Office, Browns' Flat Aboriginal Housing Corporation, NSW Aboriginal Justice Advisory Council, and Shoalhaven Community Development Aboriginal Corporation.

3. Community-Based Training and Employment Opportunities

The funding and support of training and employment opportunities for indigenous people at the community level has been identified as an important means to assist the process of positive indigenous community development. With the aim of creating such opportunities, while promoting safe indigenous communities, an **Indigenous Community Safety Officer Training Program** is proposed.

This program would recruit trainees from indigenous communities, who would be trained in the theory and application of a range of injury prevention methods. The training curriculum would comprise a composite from Health and Building, Environmental Health, Occupational Health and Safety, Sports Injury Prevention, Health Promotion, First Aid and Conflict Resolution. A strong cultural component would emphasise the application of traditional Aboriginal laws and practices as they apply to community-based injury prevention.

Potential sponsor organisations include: Illawarra Area Health Service, South Coast Medical Service Aboriginal Corporation, NSW Aboriginal Housing Office, Nowra Lands Council, Jerringa Lands Council, Wreck Bay Aboriginal Community Council, Shoalhaven City Council, NSW Health (Injury Prevention/ Environmental Health/ Health Promotion) and the Shoalhaven Community Aboriginal Development Corporation.

Sponsor organisations would share the responsibility of provision of on-the-job training for participants. Formal training would be in line with National Accreditation guidelines and be delivered in distinct training modules. On completion of the proposed three-year traineeship the graduates would have recognised qualifications and increased career options.

The development of a Community Safety Officer Program would have numerous beneficial effects for both the indigenous and wider communities. This program would ultimately reduce the injury burden on communities and the future economic burden on the health system. It would also provide:

- community-based training and employment opportunities;
- assistance with the development and dissemination of culturally appropriate injury prevention information and promotional material;
- community-based injury prevention promotions, campaigns and activities;
- assistance with the development of community-based injury feedback mechanisms;
- improved interface between government bodies and indigenous communities; and
- an effective conduit for injury prevention resource materials and training syllabuses into indigenous communities.

4.3 Moving Forward – Future Plans and Partnerships

The work of this project represents only the beginning of a continuing process. Phase 1, as reported in this document, has used existing information related to injury occurrence and causes in indigenous communities, explored its strengths and weaknesses, and supplemented it with in-depth consultation. This has stimulated the interest and support of indigenous people and service delivery agencies across a number of sectors.

In Phase 2 strategy implementation will commence. Successful implementation of the recommended short and long term actions will require a **coordinated intersectoral** approach to **community-based** injury prevention, as a means of ensuring effective and sustainable positive change. Input from different levels of a range of government and non-government (including community) agencies is required to achieve the right balance of ownership, participation and management.

The next step will be to develop a **partnership** across sectors and agencies between those who have an interest and/ or expertise in, and who have become committed to, injury prevention. This group can then bring in other key people and agencies as the project develops, to ensure that all priority injury areas receive attention in the next five years.

Existing service provision agencies which overlap with identified injury prevention priority areas should clearly be considered key players in the development, implementation and evaluation of injury prevention strategies. In addition, input from key international, national and state-based injury prevention organisations should prove invaluable, given their extensive expertise, resources and experience in supporting the positive development of injury prevention initiatives. Examples of such service provision agencies and injury prevention organisations are as follows:

- Local Government, Land and Community Councils and Aboriginal Housing Corporations are identified as key organisations in the implementation and development of many of the home and community-based injury prevention initiatives.

- Health services, both government and community-operated, should assist in accessing funds for injury prevention initiatives, as well as provide expertise in a range of health and community-related areas. The development of these initiatives would only serve to strengthen the already established Shoalhaven Aboriginal Health Partnership, which involves all Aboriginal Community-Controlled Health Organisations in the Shoalhaven and relevant services/ units of the Illawarra Area Health Service.

- Employment and training organisations represented in the Shoalhaven should be accessed for expertise in the delivery of culturally–appropriate training packages, which could develop the knowledge and skills base of indigenous people in the region. This would have the effect of improving the ability of indigenous people to make informed decisions about their lifestyle and vocational options.

- The Aboriginal Justice Advisory Council represented in the Shoalhaven has expressed strong support for injury prevention, particularly the development of a Shoalhaven Safe Indigenous Communities Initiative. Application of traditional laws and practices has been identified as an integral component of community-based indigenous injury prevention strategies.

- Sporting club administrators, managers, trainers and coaches are all identified as key individuals in the implementation and development of sports injury prevention strategies. Promotion of a positive culture of physical preparation and suitable protective equipment are fundamental to the development of sports injury prevention and minimisation strategies.

- Other associated organisations and agencies, which have been identified as potential sources of funding and/ or expertise include: World Health Organisation's Collaborating Centre on Community Safety Promotion; Aboriginal and Torres Strait Islander Commission; National Safety Council of Australia; Child Accident Foundation of Australia; Road Safety Council of NSW; Child Safety Council of NSW; Water Safety Council of NSW; NSW WorkCover Authority; NSW Department of Sport and Recreation; and Conflict Resolution Network.

In the short term, future decisions about injury prevention within Shoalhaven indigenous communities should be the responsibility of this Project's Advisory Committee. In the longer term a new decision-making structure will be needed that facilitates full participation of all partners. The shape of this future management group should be determined by the agreed priorities, and draw upon the strong indigenous community leadership and decision-making processes already in existence in the area.