

8. How accurate is Aboriginal identification and what effect does this have on our understanding of routine statistics

Mid North Coast Validation of Aboriginal Status in Emergency Department records

Method

A sample of emergency department records was selected from each of the Emergency Departments in Coffs Harbour, Kempsey and Taree. Coffs Harbour and Kempsey were combined to form the North Area and Taree represented the South Area. Two hundred cases identified by emergency department as Aboriginal and two hundred cases as non-Aboriginal were selected at random after stratifying attendance data by Aboriginal status from each area. In each area three Aboriginal leaders were provided with a randomly sorted list of names and locality of persons in the sample. No causal or other information was revealed. Each rater independently indicated whether they knew the person as Aboriginal, non-Aboriginal or their Aboriginal status was not known.

It was not expected that each rater would know the same people. Multiple raters were used to increase the chance of obtaining an independent assessment of Aboriginal status on the maximum proportion of the sample.

Raters worked independently. Their ratings were combined as follows. If any rater indicated that the subject was Aboriginal, this status was assigned. If all three raters indicated that the person was not Aboriginal, this status was assigned. All other cases were assigned as status unknown.

The ratings were then compared with the original Emergency Department assessment. Confidence intervals were calculated for the number of cases where the ED has coded them as non-Aboriginal and the number of cases coded as Aboriginal by ED but who had been identified as not Aboriginal by the local raters.

Table 2 Results

North

ED rating	Combined raters assessment			
	<i>Aboriginal</i>	<i>Unknown</i>	<i>Not Aboriginal</i>	<i>Total</i>
Aboriginal	139	40	21 (95%CI 12-30)	200
<i>Not Aboriginal</i>	21 (95%CI 12-30)	134	45	200
<i>Total</i>	160	174	66	400

South

ED rating	Combined raters assessment			
	<i>Aboriginal</i>	<i>Unknown</i>	<i>Not Aboriginal</i>	<i>Total</i>
Aboriginal	161	12	27 (95%CI 17-37)	200
<i>Not Aboriginal</i>	20 (95%CI 11-29)	38	142	200
<i>Total</i>	181	50	169	400

Discussion

It is clear that the raters in the two areas responded differently to the instructions or that there are differences in the areas. In the north the unknown category was used more often whereas in the south the raters felt more confident to positively identify persons who were non-Aboriginal. This possibly reflects the different nature of the communities with the southern communities of Taree and Forster consisting of more traditional country towns where a greater proportion of people are known to each other. This would be less likely to be the case in the northern area of Coffs Harbour where it is much larger and has a very high tourist presence.

Despite the large difference in the way in which the “unknown” category was used, the results for Aboriginal people are very consistent. In both areas about 10 percent of cases identified as non- Aboriginal in A&E records, were identified by raters as Aboriginal. In addition in the South 13% and the North 10% of those cases identified by the A&E as Aboriginal were defined as “definitely not Aboriginal” by all three raters.

There is therefore a considerable error rate in the identification of Aboriginal status in A&E departments and this appears to be consistent across both areas. It is important to note however that the error does not balance itself out. This study used a fixed number of cases in each sub-sample. The sampling fractions are therefore quite different and the impact on the overall estimates of Aboriginal injury is considerable. Non-Aboriginal cases are by far the majority of the cases treated by the A&E Departments. When this is taken into consideration, the impact of the error can be accurately assessed.

A number of factors need to be taken into account in calculating the effect. Firstly the three raters in the north were able to confidently identify the status of 60% of those rated as Aboriginal by A&E. In the South this was 88%. The numbers of those identified as Aboriginal by raters, but not by the A&E need to be corrected for this factor.

Table 3 Factors for ED Injury data to correct underestimation Aboriginal cases

	Percentage of non Aboriginal cases that are Aboriginal (based on sample)	Percentage of Aboriginal people identified by raters	Estimated percentage of Non Aboriginal cases that are Aboriginal Corrected for under-identification
North	10.5	60	17.5
South	10	88	11

Note: These estimates here are based on sample measures. Confidence intervals may be applied to obtain a range estimate.

In addition the raters indicated that in the North 10.5% and in the South 13.5% of those counted by A&E as Aboriginal were not Aboriginal. Aboriginal case estimates therefore need to be lowered to accommodate this factor

Based on these data a corrected estimate of Aboriginal injury presentations to A&E can be made. A&E Department data was used to calculate population rates for Aboriginal and non-Aboriginal populations. Separate rates were calculated for the North of the area (Coffs Harbour and Kempsey) and the south (Taree and Forster). Uncorrected rates used the raw A&E data. Corrected rates weighted the Aboriginal and non-Aboriginal rates by the correction factors estimated in the validation study. The results are shown in Figure 6 and Figure 7.

It is clear that A&E data severely underestimates the incidence of Aboriginal injury. The real incidence rate among Aboriginal people is six to seven times that of non-Aboriginal people. The underestimate is relatively consistent across both areas and is similar to that previously measured in Shoalhaven.

Figure 6 Uncorrected rates of injury for Aboriginal and Non Aboriginal People by Region

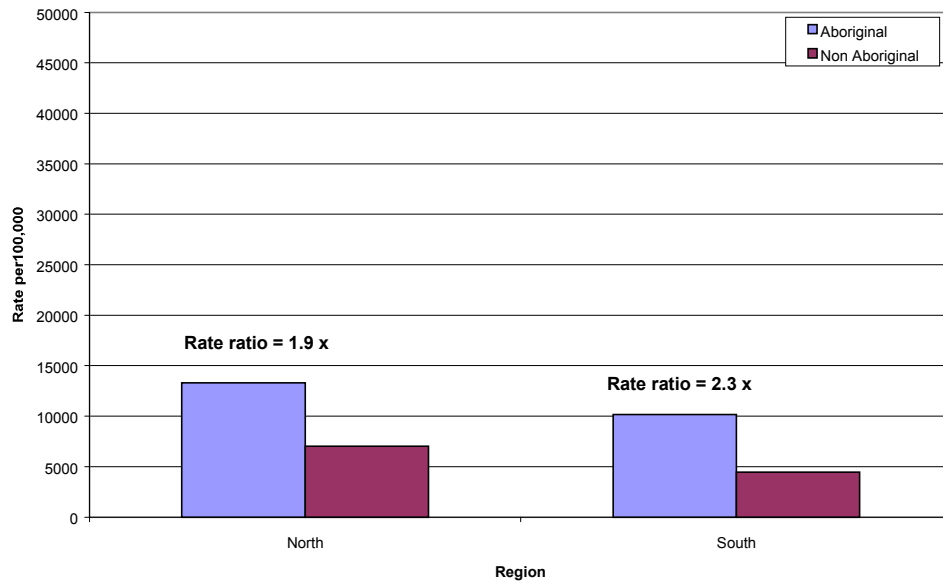
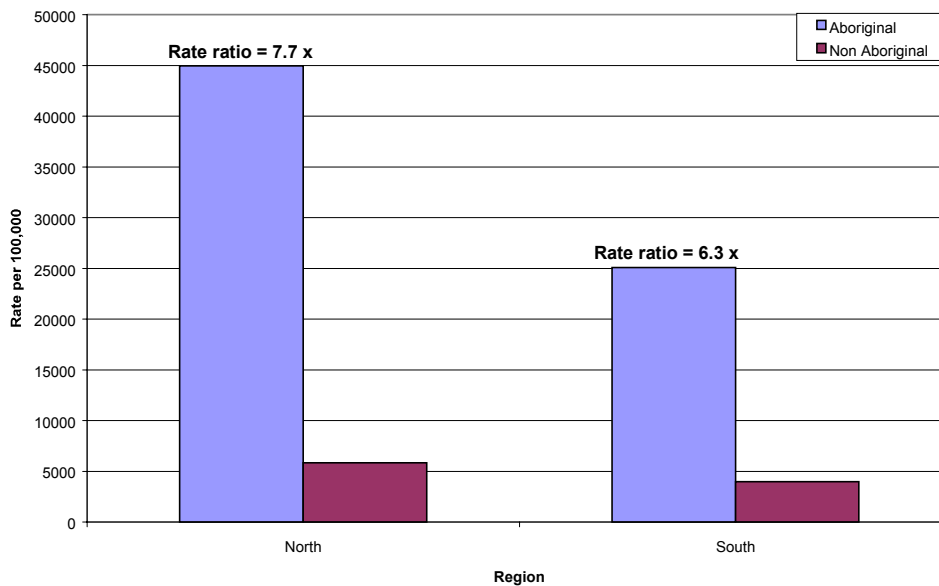


Figure 7 Corrected rates of injury for Aboriginal and Non Aboriginal People by Region



9. Patterns of Injury on the Mid North Coast

Aboriginal deaths resulting from injury

Injury is one of Australia's priority health areas. Injury among Aboriginal people has been shown to be at least three times as common as among non-Aboriginal people. Even this is considered to be an underestimate as it has been shown that in health and mortality collections in Australia that Aboriginal status is not accurately determined.

It has also been shown that patterns of causes of injury among Aboriginal people vary significantly from their non-Aboriginal counterparts.

Table 4 A comparative overview of Aboriginal and Non Aboriginal Injury deaths in Australia by cause

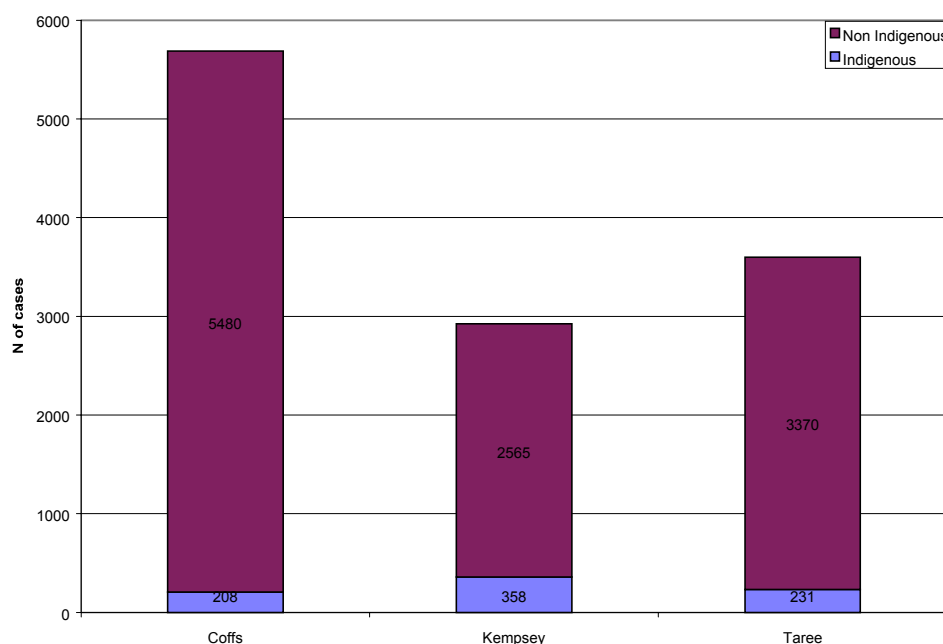
Type of injury death	1990-1992		Non-Aboriginal		Ratio of age-adjusted rates: A&TSI vs non-A&TSI rates:
	Aboriginal and Torres Strait Islander peoples	% of all injury deaths	Average number of deaths	% of all injury deaths	
Transport	75	41	1983	34	3.4
Drowning	11	6	207	4	4.8
Poison: medications, etc	5	3	152	3	2.2
Poison: other substances	9	5	32	1	17.5
Falls	5	3	788	14	1.2
Fires, burns, scalds	7	4	112	2	10.5
Other unintentional	16	9	453	8	3.4
Self harm	22	12	1818	31	0.9
Interpersonal violence	34	18	252	4	10.8
Total	184	100%	5797	100%	2.8

Source Moller J The importance of injury in Aboriginal and Torres Strait Islander peoples AIHW NISU *Injury Prevention Bulletin* No 8 1997.

Aboriginal and non-Aboriginal injury patterns

Of the 12,212 injury presentations to the three Accident & Emergency Departments (A&E) 797 of those were recorded as being Aboriginal. Using the uncorrected data for injury presentations, Aboriginal people residing in the northern region of the area (Port Macquarie to Woolgoolga) made up 71% of all Aboriginal presentations to an A&E facility in the area. Kempsey LGA has the largest Aboriginal population on the Mid North Coast and accounts for 45% of all Aboriginal injury presentations for the area followed by Greater Taree which includes Forster 29%, and Coffs Harbour including surrounding areas 26%.

Figure 8 Numbers of Aboriginal and Non Aboriginal Injury Presentations by Facility



Who is injured?

Responses to the question “Are there any particular groups at risk of injury?” were as follows: kids and youth in general 3 to 15 years; young adults 15 to 25 years; everyone 0 to 30; men and women 18 to 45 years; elders over 55 years; and any koori outside a CBD.

Table 5 Aboriginal Injury Presentations by Sex and Age (1 July 1999 to 30 June 2000)

Age group	Male	Female	Grand Total
0 to 9	118	88	206 (26%)
10 to 19	114	77	191 (24%)
20 to 29	82	74	156 (19%)
30 to 39	70	63	133 (17%)
40 to 49	39	32	71 (9%)
50 to 59	13	16	29 (4%)
60 to 69	3	4	7 (1%)
70 to 79	1	1	2 (0%)
80 to 89	1		1 (0%)
90 to 99	1		1 (0%)
Grand Total	442	355	797 (100%)

Discussion

As shown in Figure 4 the area has a young Aboriginal population with a rapid decline in population with increasing age from the age of 35 years onwards. Therefore, it is anticipated that a larger proportion of injury would be evident among the younger Aboriginal population.

However, it is clear that the rates of injury among males and females aged 15 to 39 are considerably high in comparison to the area's Aboriginal population for that age group. The community response was consistent and further supported the quantitative findings for that age group. The rates of injury are consistently higher for males than females for all age groups except for women aged 50 to 59.

Where do injuries occur?

Place

Responses to the question "Where do injuries happen?" are as follows: in and around the home; within our own environment; sports fields; where we live and play; in the community setting; anywhere around the mission; near any drinking spot; public places; on the roads; in the north it's everywhere.

Table 6 Place of injury percentage within each age group

Place	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	Grand Total
Athlete/sport fields	0	9	11	5	5	0	0	0	6
Farm	0	0	3	0	0	0	0	0	1
Home	71	33	39	46	50	50	100	0	48
Hospital/health service	0	0	3	0	0	0	0	0	1
Other specified	0	5	5	8	5	10	0	0	5
Recreational	15	21	24	13	15	0	0	100	17
Road	10	12	11	10	15	20	0	0	11
School/public amenity	2	7	0	0	5	10	0	0	3
Trade/ service	0	0	3	3	0	10	0	0	2
Unspecified	2	14	3	15	5	0	0	0	8
Grand Total %	100	100	100	100	100	100	100	100	100
Grand Total Number of Cases	41	43	38	39	20	10	2	2	195

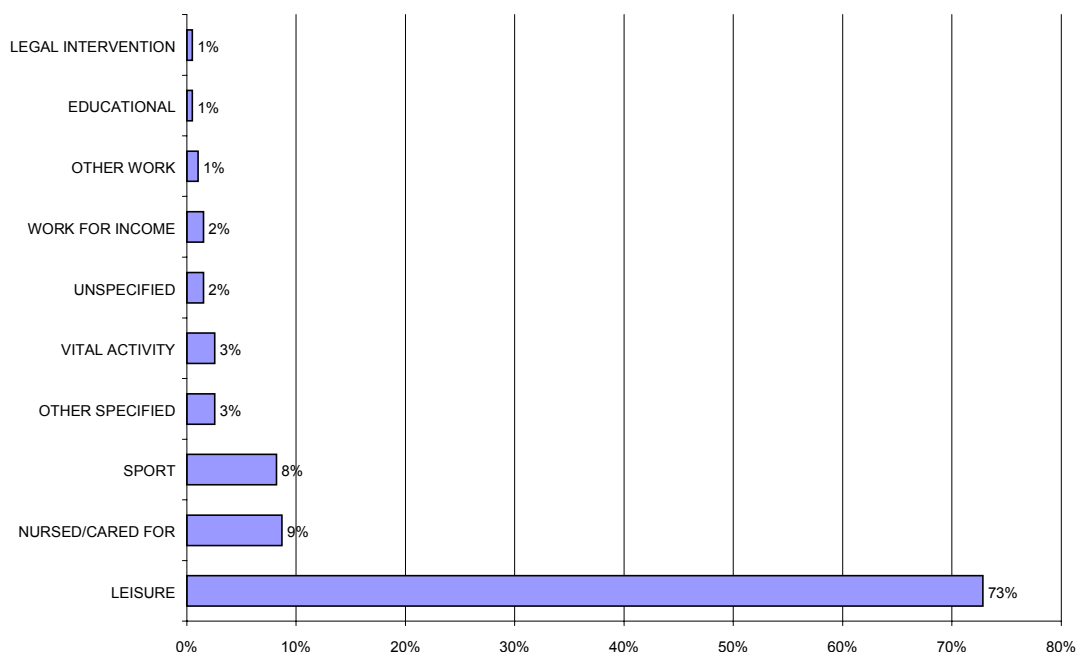
Discussion

The quantitative findings compare well with the communities' responses to the place where injury occurs. The findings show that the major place of injury (48%) occurs in and around the home. The communities define home as the community environment (mission) which is inclusive of home, garden, playing fields, creeks, bush and community roads. Whereas, recreational places (17%) are slightly more blurred and are considered to be any place where leisure activities occur external to the community environment. This includes many public places such as roads, footpaths, parks, pubs, sports fields, shopping areas, rivers and beaches. The 11% of injury, which was attributed to road trauma, were clearly defined as any road, highway or footpath.

Activity

Responses to the question "What are people doing when they're injured?" are as follows: hanging around bored; drinking; drugging; fighting; throwing stones; walking; oyster hunting/fishing; riding bikes; driving cars; riding motor bikes; annoying animals; climbing trees; playing sport; playing in and around dumped cars; surfing; swimming; jumping into rivers; working; everyday activities.

Figure 9 Activity at time of Injury



Discussion

It is clear from both the data and the communities responses that three-quarters of all injury presentations to any of the three A&E’s were solely attributed to leisure activities. All bar one response (working) from the qualitative findings was consistent with the information recorded on presentation to an A&E.

Intent

Responses to the question “Are they intentional or unintentional injuries?” are as follows: accidental injuries are the most common; sometimes injuries are self inflicted because of alcohol and drugs; accidental because of the lack of maintenance; intentional or deliberate injuries are a result of violence, abuse and alcohol; mainly accidental except for alcohol, domestic violence and fighting; both self inflicted and accidental are both common in our community.

Table 7 Intent of injury percentage by gender

Intent	Male	Female	Grand Total
Accidental	86	55	72%
Intent self	8	3	6%
Legal intervention	1	0	1%
Other assault	11	13	12%
Parent maltreatment		2	1%
Partner maltreatment	1	6	4%
Sexual assault	1	1	1%
Treatment medical	1	3	2%
Undetermined intent	1	0	0%
Unspecified intent	2	0	1%
Grand Total	112	83	100%

Discussion

Although both qualitative and quantitative methods have clearly determined that three quarters of the injuries that have occurred among Aboriginal communities on the Mid North Coast have been unintentional. It is interesting to note that communities are of the view that injuries which are sustained as a result of alcohol, drugs, domestic violence or fighting are considered to be of an intentional or deliberate nature.

Although the data indicates that interpersonal violence accounts for 19% of injuries, the communities consider it to be much higher. Narratives in health records do play clear information on intent. The combination of alcohol, financial hardship, low self esteem and impoverished environmental settings are all considered to be a contributing factor in most cases.

What sorts of injury occur?

Causes

Responses to the question “What do you think are the main causes of injuries among Aboriginal people in the area?” are as follows:

North: broken glass, matches, lighters, community fires, alcohol & drugs, spiked drinks, petrol & paint sniffing, prescription medication, gambling, domestic violence, rape/sexual assault, neglect, bikes, skateboards, sport (considered positive injury not negative injury), falls, old metal ie. dumped cars, boredom, violence, swimming in creeks and ocean, jumping of bridges into water, cooking with fat, car accidents, bites, living in and around bush snakes etc, damaged playground equipment, fishing and oysters, inadequate house aids for the elderly, old houses, non compliance with medications, open drains.

South: violence, alcohol, sexual assault, bikes, scooters, skateboards, alcohol related falls, kids have shoes but refuse to wear them, glass, neglect, child abuse, poorly maintained homes ie. steps and railings missing, playing around old cars, drug use, crime, motorbikes, stabbing, lack of supervision, pot holes, dog & cats, mental health people, hot water and oil, exhaust bike burns, boredom.

Common Responses:

Sport - fields built on old tips with debris coming up through ground, hard compacted ground, potholes, alcohol, contact sport

Riding bikes - while drunk, only means of transport, kids won't wear protective gear because it's 'uncool' or don't have it, unsafe bikes

Roads - no pedestrian crossing near estates (ex-reserve), car accidents, motor bike accidents, alcohol, under age drivers

No shoes – kids have them but won't wear them

Food gathering – fishing, oysters, skinning/cutting up roo's

Falls – pot holes, alcohol, fighting, playing in trees (no play equipment), poor lighting and/or no pathway along roadway

Swimming – jumping into creeks, surfing, alcohol

Gambling – lose money, stress out, get angry and become violent or self-harm

Violence – alcohol, drugs, boredom, unemployment, low self esteem, financial hardship, stabbing, jealousy.

Table 8 Aboriginal injury causes by percentages for each age group

Cause	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	%Total	N Total
Bicycle rider/passenger	12	5							4	7
Cut/pierce	20	19	13	5	5	10		50	13	26
Dog related	2	5	3						2	4
Drown/submersion	2								1	1
Electricity		2							1	1
Fall – higher >1m	12	2	3		10				5	9
Fall – lower < 1m	7	14	8	18	20	20	50	50	14	27
Horse related	2								1	1
Machinery			3	3	5				2	3
Motorcycle driver		5			5				2	3
Motor vehicle driver		2	3	3					2	3
Motor vehicle passenger			3		5				1	2
Other animal					5				1	1
Other specified	7	7	16	18	10	10			11	22
Other transport		2	3						1	2
Pedestrian	2		8			10			3	5
Poison – medical	7		5		10				4	7
Poison – other	5	5	5	8	15				6	12
Scalds	2								1	1
Struck by object	2	19		8		20	50		8	15
Struck by person	7	14	29	36	10	20			19	38
Unspecified	7			3		10			3	5
Grand total %	100	100	100	100	100	100	100	100	%100	
Grand Total N of Cases	41	43	38	39	20	10	2	2	195	195

Discussion

There was a high degree of consistency with regard to the cause of injury from both the community response and the information obtained from medical case notes. There is an overwhelming correlation between alcohol and interpersonal violence, falls, lacerations and transport related trauma. Sport was also particularly evident as a main cause of injury. On review of medical case notes it was associated with falls, struck by person, struck by object and accounted for a large proportion of data captured in the field “other specified”. Burns from community fires, exhaust pipes, cooking and bites from domestic pets, snakes and wasps were also found to be a significant cause of injury, which were also captured in the field “other specified”. Broken glass, alcohol and violence accounted for a large proportion of cuts and lacerations.

The following responses were obtained from various community members and provide further insight by highlighting some of the underlying issues associated with injury cause.

“There is a community fire pit, to keep it tidy a few rows of brick were put around it to keep it tidy. Over 3 months 4 people had fallen in drunk and got badly burnt. When they fell in they couldn’t roll out because of the brick wall around it. Aboriginal Health Staff had to come down everyday for weeks to redress the burns on a couple of the people after they got out of hospital. Everyone became scared of the pit and no one wanted to help fix the problem. The health staff talked with us and decided that they would use some injury prevention money they had and put it towards a fence. So that’s what happened, we got a good fence (like a pool fence) with a gate in it so we could still clean it out. Ever since we got the fence no one

has had an accident. The health staff reckon that the fence was much cheaper than the cost of treating people everyday”.

“When the council people mow/slash the grass around the mish (ex-reserve) they never seem to get off the tractor or mower and pick-up any litter, they just drive over it. Then we end up with broken glass and tin everywhere, the kids end up cutting their feet and stuff. It doesn’t take much to get down and pick it up and put it in a potato bag, I know they do it because I have seen them do it at other parks around town”.

“The alcohol problem is worse now because people can nominate which day they get their pension and have it split up so they get money every week. There’s alcohol in the community everyday now, before it was just a few days fortnight. Because of this there are more fights, people getting jealous and abusing their partners, and one bloke tried to cut his finger off because he had too much to drink. The authorities should have looked at what might happen before they changed pension rules”.

“Some the blokes go out in the bush and kill a roo, then they hang it on a chain on a tree to skin and gut it. When they finish up there are bones and guts all over the ground, the kids come along and it’s dangerous. They get cut by the sharp bones and slip in the guts and stuff. It wouldn’t take much to have a proper spot to do this where they could hang it up safely, hose it down and throw the left overs in a bin so the kids or blokes couldn’t get hurt”.

“The young blokes go down to the wreckers and buy cheap unregistered cars and drive them flat out through the bush and around the streets on the mission (ex-reserve). It’s really dangerous, the other night one lad with his mates had a bit to drink and flew up the road lost control, hit a power pole and snapped it in half. The whole community was blacked out for hours and there was glass everywhere. This happens a lot, the wreckers shouldn’t be able to sell cars to kids who don’t have a drivers licence”.

“We have a bus stop out the front of the community but because the new freeway has an off ramp which comes right around the side and front of our community and because the cars come around there so fast the bus won’t stop there any more. So everyone including the little kids and elders have to walk all the way down road to the next stop if they don’t they won’t get a ride. They have also made the road 4 lanes wide. We have the closest shop across the road but there is no crossing, we have elders and kids trying to cross to the shop while cars are coming off the exit ramp very fast. It won’t be long until someone is killed”.

Types of injury

The following are responses to the question “What do you think are the main types of injuries (and poisoning’s) that happen among Aboriginal people in the area?” and have been rated according to what the community considered to be the most common:

Injury	Responses	Rating	Comments
Cuts/Lacerations & Abrasions	36	1	(Feet, Hands, Head, Face) stab wounds, broken glass, fighting, domestic violence, bikes, roller blades, cans, dumped cars, oysters, motor vehicles
Bruising/Contusion	28	2	Falls, contact sport, violence,
Sprains/Strains	26	3	Sport, violence, falls,
Broken Bones	19	4	Violence, broken knuckles and hands from fighting, sport, tree climbing, motor vehicle
Head Injuries	13	5	Violence, falls, sport
Fractures	12	6	Falls, contact sport, violence,
Burns	9	7	Community fires, cooking fat, cigarettes, motor bike exhaust pipes,
Bites	7	8	Mosquito bites (infected), wasps, dog, human, snake
Soft Tissue damage	6	9	Sport, violence
Dislocation	4	10	Sport, falls
Poisoning (alcohol)	2	11	Alcohol, drugs, bites, medications
Blisters	1	12	Sport

Table 9 Total Aboriginal injury (cases) by trauma (1 July 1999 to 30 June 2000)

Injury type	Total
Fracture of Skull	3
Superficial Injury	74
Open wound of Head, Neck and trunk	70
Open wound of upper limb	77
Open wound of lower limb	78
Poisoning by drugs, medicinal and biological substances	42
Fracture of Lower Limb	16
Sprains and Strains of Joints	143
Dislocation	14
Other and unspecified effects of external causes	99
Contusion with intact skin surface	43
Effects of foreign body entering through orifice	23
Intracranial Injury (excluding those with skull fracture)	58
Certain traumatic complications and unspecified injuries	23
Burns	3
Toxic effects of substances chiefly non medicinal	21
Crushing Injury	10
Grand Total	797

Table 10 Aboriginal injury (cases) by trauma and age (file audit sample)

Trauma	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	Total
Bite Venomous	2	1	1		2				6
Burn/Corrosion	1								1
Concussion/Intracranial	5	1	2	1					9
Crush Injury	1	1	1	1					4
Dislocation	1	1	1	1	1	1			6
Drowning	1								1
Electrical		1							1
Eye No Foreign Body			1						1
Foreign Body External Eye					1				1
Foreign Body Other/Unspecified				1					1
Foreign Body Respiratory						1			1
Foreign Body Soft Tissue	2				1				3
Fracture	2	2	2		3		1		10
Multiple		3	3	3	2	1			12
Muscle/Tendon				1					1
No Injury	2								2
Open Wound/Cut	12	18	10	13	1	4	1	2	61
Other Specified	2			3	1	2			8
Poison/Toxic No-bite	2	1	3	3	5				14
Sprain/ Strain	2	9	11	9	3				34
Superficial No eye	4	3	2	2		1			12
Trauma Amputate		1							1
Unspecified	2	1	1	1					5
Grand Total	41	43	38	39	20	10	2	2	195

Discussion

There is a high degree of consistency with regard to hospital data and the communities' responses, both align well. It is clear that the most prevalent injuries among Aboriginal people on the Mid North Coast are cuts/lacerations which account for up to 30% and sprains/strains which account for up to 20% of all injuries. Although contusions and bruising were not initially significant in the hospital data they were on review. Bruising and contusions attributed to a significant proportion 25% of presentations recorded in other fields namely superficial injury, other and unspecified, superficial no eye, other specified and multiple. The other injuries of concern are cranial injuries, fractures and poisoning's.

Although there was a high degree of consistency between hospital data and community response, the perception of the community is that the true prevalence of these injury types is much greater. In all three qualitative methods used, it was apparent that most people would go to the clinic first and opt for A&E only if the clinic was closed or the clinic referred them there.

The following responses came as a result of the question “What other things do you think need to be said about injuries among Aboriginal people in and around the area?”: if it’s an emergency I will go to A&E via ambulance otherwise we see the doctor from the clinic; not everybody trusts doctors at the hospital because they call the police or DOCS; people just won’t wait there for 3 to 6 hours so they ride it out at home until our clinic opens, sometimes for a few days; GP or clinic because they bulk bill: most people don’t go anywhere unless after a few days it gets real bad or the pain is bad then go to the clinic; normally A&E after hours or on weekends; won’t get medical help if drunk will wait until the next day because of shame; most injuries seem to happen on a weekend and people wait for AMS to open; reluctance to get help because of shame; most clinic workers can be called on or phoned on weekends if it’s bad because most of them live in the community; A&E don’t do appropriate discharge plans which results in no follow-up or the person arrives at the community clinic and the staff have no idea of what they were treated for or their treatment plan, so why bother.

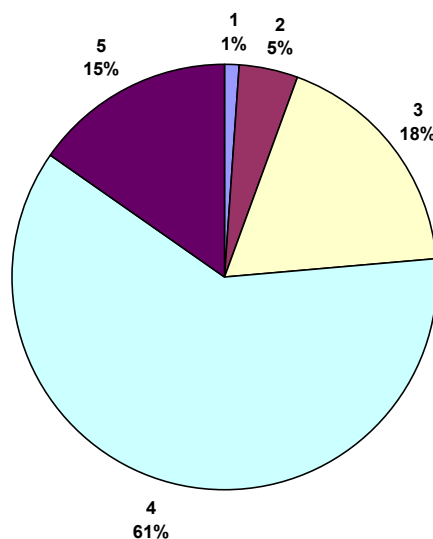
Severity: Triage categories

Triage is the process used to sort patients into groups at A&E Departments. Patients are classified according to the urgency of their need for medical and nursing care. The coding system is 1 to 5 and classified in the following way:

1 = Resuscitation	Treatment acuity within seconds
2 = Emergency	Treatment acuity within 10 minutes
3 = Urgent	Treatment acuity within 30 minutes
4 = Semi-urgent	Treatment acuity within 60 minutes
5 = Non-urgent	Treatment acuity within 120 minutes

(Source of definition: EDDD V2.0)

Figure 10 A&E Triage Categories for Aboriginal Injury



Discussion

The data obtained from the Emergency Department Information System (EDIS) clearly indicates that not all injury presentations to A&E are medically serious. However, the data

does tell us that of the 797 Aboriginal injury presentations to A&E 24% were requiring immediate or urgent attention within 30 minutes. The large majority of injury presentations 61% were considered to be semi-urgent and needed to be treated within one hour.

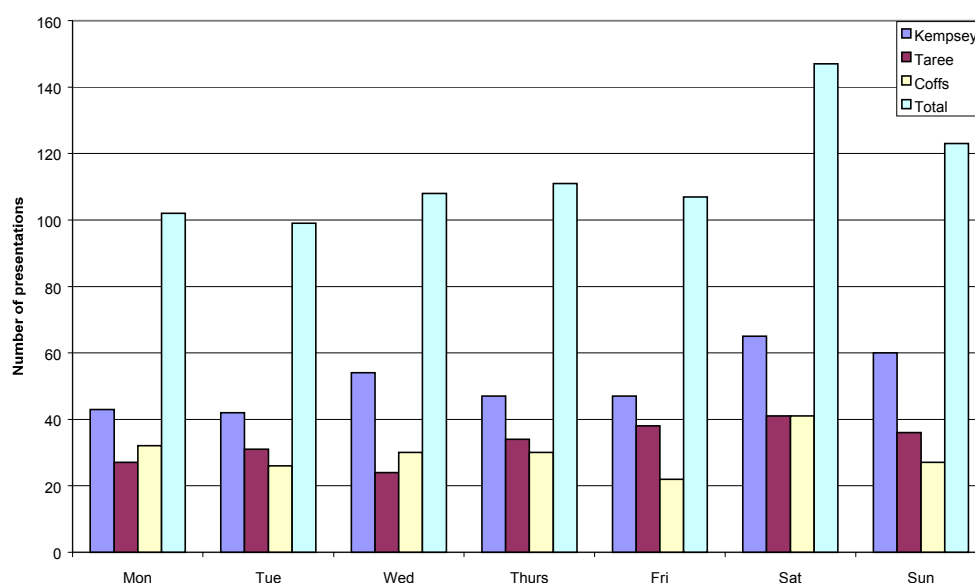
It was interesting to note that according to EDIS data only 15% of non-urgent Aboriginal injury presentations were required to wait for up to two hours. However, responses from the community clearly indicate that in reality this is not so, and in most cases they had experienced waiting times of three to six hours. For the Aboriginal population these waiting times are considered to be a display of blatant discrimination and gate keeper mentality of health services delivery to Aboriginal people. Unless a study is conducted with the medical and nursing staff of A&E departments it will never be really known. It appears likely that staffing levels and possibly discrimination contribute to delays and lack of appropriate personal and treatment responses. This undermines the use of services by Aboriginal people and contributes to feelings of anger and frustration with the health system.

When do injuries occur?

Day of week

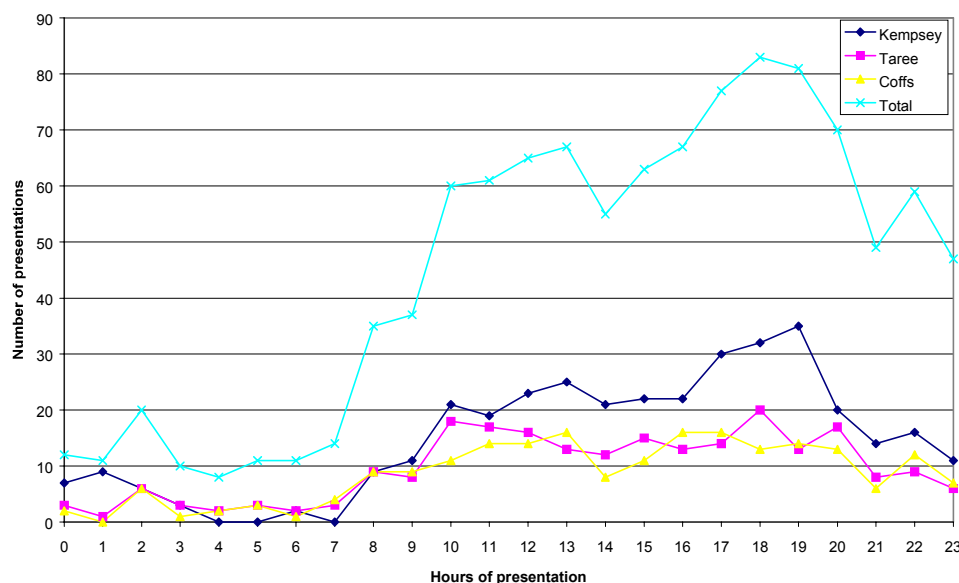
The following responses were provided by various community members, and discussed during the course of the focus groups and interviews: alcohol is worse now because people can pick the day they get their pension and split it over the two weeks; there's more grog in the community because there is more money; it would be good if authorities discuss changes to pension with us rather than think it's a good idea cause it will give people money every week for food cause that ain't the case; after five the clinic's shut so A&E is the only place left to go; late at night the pubs shut people fall over or something happens so if they're hurt night patrol take them to the hospital; injury for our mob happens anytime any day because a lot of people don't work so there's always something happening.

Figure 11 Day of presentation to ED by facility



Time of Day

Figure 12 Time of Emergency Department presentation by facility



Discussion

On review of hospital data it is apparent that 34% of all injury presentation are over the weekend period. There is a prominent increase of injury presentation on Saturday for all communities across the mid north coast. However, for the southern region Friday through to Sunday are the increased days of injury presentation and risk. Whereas, Friday injury presentations decrease for the northern region. This further highlights the differences in community activity between the northern and southern regions.

There is a consistent increase in people presenting to A&E for injury between the times of 4pm and 8pm. These times are reflective of the availability of clinical services within the community setting. A majority of services either close at 5pm or have limited availability of staff, and therefore have to refer patients to A&E. Alcohol, interpersonal violence and falls account for a majority of injury presentation between the times of 9pm to 3am. One community in the northern region operates a night patrol which transports people in need of medical treatment to A&E, this obviously impacts on the number of presentations between those times. However, responses obtained from community members would support the notion that a majority of injuries that occur late in the evening or in the early hours of the morning will not be dealt immediately. It was reported that people don't either realise the severity of the injury, will wait until they are sober or will wait until transport is available. This would account for the rapid increase in injury presentations to A&E from 7am to 10am.