16.0 RECOMMENDATIONS

This overview of available injury statistics has highlighted a number of areas for further research. These are detailed below:

1. Poisoning-related injury
   – unlike any other injury mechanism, death rates for poisoning have been increasing since 1997. The profile suggests that this increase is most likely to involve males in the 20 to 49 years age group and to involve narcotics and hallucinogens. More research is needed to clarify the reasons for this increase and to use this information to develop more specific approaches to reduce poisoning.
   – children under the age of five years are over-represented in hospitalisations for poisoning. Further research is needed to clarify the types of substances involved and the circumstances in which young children are able to obtain access to them.
   – For more than half of the hospitalisations for poisoning and over one-third of deaths, the substance involved is classified as other or unspecified. This greatly limits the analysis of the causes of poisoning and is clearly an area requiring further examination.

2. Motor vehicle crashes
   – young drivers are clearly at highest risk of injury involving both death and hospitalisation. A clear research need is to develop better understanding of why this age group has such a high representation in motor vehicle crashes. A review conducted by the Centre into the factors involved in young driver-related crashes concluded that inexperience and risk taking behaviours were the most likely factors contributing to the higher crash risk. Further research is needed to examine the relative contributions of these two factors and to assist in developing relevant interventions to overcome them.
   – older drivers also show higher crash risk although they do not represent such a large proportion of the number of motor vehicle crashes. Research is needed to understand the main contributors to this higher risk and to identify those older drivers who may be most at risk.
   – The profile analysis demonstrated that for around one in five hospitalisation for motor vehicle injury the type of person injured could not specified. Further investigation is needed to clarify the problems of coding these cases.

3. Drowning
   - Drowning is of concern because the risk of drowning is currently almost certainly underestimated by conventional rate estimates such as used in this profile, which do not take potential exposure into account. Furthermore, the review of drowning and near-drowning undertaken by the Centre in October, 2000 for the Australian Water Safety Council concluded that there was a strong link between opportunities for exposure to water and higher risk of drowning. Research is therefore needed to understand the differences in exposure in the community to drowning risks in daily recreational, sporting and occupational activities.
   - children under five years of age have markedly higher drowning and near-drowning rates compared to virtually all other ages. The Centre is currently conducting a study of drowning-related deaths involving under six year olds using coronial records over the period 1995 to 2001. This study is investigating the risk factors for drowning through looking at the wider circumstances in which drowning occurs for this age group. The next stage of this research needs to focus on development of interventions to manage
these risk factors.

4. Fire and burns
   - Over 65 year olds had higher death rates whereas under five year olds were more likely to be hospitalised due to fire and burns. Most hospitalisations in this category were due to exposure to hot, caustic or corrosive substances. The reasons for these differences are not well understood, consequently, more in-depth analysis is needed to reveal the specific factors contributing to the risk of fire and the risk of burns for different age groups.

5. Falls
   - Falls are a major source of hospitalisation for most age groups, but particularly over 65 year olds and to a lesser extent children between 1 and 15 years of age. Falls in the elderly has attracted considerable attention in recent years, and has tended to overshadow the problems of falls in children. Consequently, research is needed to understand the risk factors for falls in children and to develop better approaches to prevention, which take into account the need for active play, but minimise the risk of injury due to falls.

6. Complications of care
   - Complications of health care are relatively less likely to result in death than other injury mechanisms but considerably more likely to result in a stay in hospital or prolong the stay. Much less is known about Complications of care than about most other injury mechanisms discussed in this report. Research is needed which attempts to understand the circumstances in which the different types of complications of care occur. In particular this research needs to look at the environmental, equipment and behavioural factors that led most immediately to the complication occurring and to any pre-existing factors that might have contributed to the event occurring such as organisational, training, supervision, work practice and environmental or workplace design factors. This information can then provide firm foundations for the development of strategies for preventing complications of health care.

7. Studies of overrepresentation of males in most injury mechanisms
   - Males dominate the injury death and hospitalisation statistics for most injury mechanisms. Death rates were markedly higher for males for all injury mechanisms reviewed in this report except Complications of care and drowning in bathtubs. The gender difference was not as pronounced for injury-related hospitalisations, although males still had higher hospitalisation rates for IPV, Fire/burns and most types of all other injury mechanisms. This gender difference is usually interpreted as due to the higher exposure to hazards and higher risk taking behaviour in males. Nevertheless, relatively little research has focused on the reasons for higher injury rates in males to confirm this interpretation. As they so clearly dominate the injury statistics, any reductions in injury rates for males would have a great impact on overall injury rates. Consequently, further research is needed to clarify the gender differences in causes of injury in an attempt to uncover new approaches to reducing injury in males.

8. Quality and coverage of injury data
   - For a number of injury mechanisms, there are difficulties in coding because of overrepresentation of the use of the other or unspecified codes. Research is needed to determine how much the use of this code is due to poor source information or inadequacies of coding framework and to determine to what extent such problems might be overcome.
- In addition, other population-based sources of morbidity data (e.g., emergency department, ambulance data, general practitioner, consumer products) need to be developed further and analysed to fill in gaps in knowledge regarding the impact injuries have on New South Wales and to see if the same patterns in injuries exist.