

The challenge ahead

Although Queensland's five year moving average of electrical fatalities has been below the national average for the past six years, there is no room for complacency. The slight upward trend of recent years needs to be addressed and strategies put in place to align with the five year goal of this Plan—to eliminate all preventable electrical fatalities in Queensland.

Analysis of risk is an integral part of strategic management and is an essential ingredient for achieving the outcomes of the Plan and, in turn, the business plan of the Electrical Safety Office. Rather than being viewed or practised as a separate program, risk analysis has been integrated into the philosophy, planning and preparation of this Plan.

The Plan's new priority areas and strategies were developed using an evidence-based approach. One of the main inputs was from an analysis of information surrounding electrical fatalities between 1998–99 and 2007–08. As part of the analysis, the type of equipment involved in the majority of electrical fatalities over that time was identified. The top three of these included:

- Fixed wiring 31% (18 fatalities)
- Powerlines (overhead) 29% (17 fatalities)
- Portable appliances 25% (14 fatalities)

These top three categories represent 85 per cent of the total electrical fatalities in Queensland over the past 10 years. In addition to electrical fatality data, serious electrical incident data was analysed as this can also be indicative of potential causes for electrical fatalities. Results showed that the three categories identified above, were also well represented in this data set.

In formulating the new priority areas, data from both these sources and other workplace incident and claims data were considered, together with fatality data from other Australian jurisdictions and New Zealand. Additionally, other potential sources of electrical risk relating to emerging trends and issues were also identified and assessed to supplement the existing electrical incident information.

As a result of this analysis three priority areas were identified which, while including the above three categories, also reflect wider electrical safety risk areas.

Priorities

The new electrical safety priority areas for the Plan are:

Powerlines — This relates to preventing contact with overhead or underground powerlines, whether as a result of working close to them, coming into contact with them accidentally while undertaking other activities, or contacting fallen powerlines. A key focus of this priority area will be the rural industry sector.

Electrical installations — This relates to reducing electrical incidents associated mainly with fixed wiring and related electrical accessories in workplaces and dwellings. Issues which will be a focus of this priority include the work practices of the general electrical industry, other industries which can affect the integrity of an electrical installation, unlicensed electrical work and examining options for improving the coverage of safety switches.

Electrical equipment — This relates to reducing electrical incidents associated mainly with portable and stationary electrical appliances, flexible cords and cord extension sets. Issues which will be a focus of this priority area include maintenance of electrical equipment and unlicensed electrical work. In addition this priority seeks to increase the proactive work towards influencing electrical safety improvements in the design stage of electrical equipment. This includes the above mentioned appliances and cords as well as electrical equipment associated with electrical installations.

Strategies

Under each of the three new priority areas, strategies have been developed to address identified issues by looking at the people, places and products most likely to contribute to, or be most affected by, an electrical incident.

These strategies have been grouped under the following common headings.

- education/awareness
- legislation
- compliance
- training
- equipment design/innovation

The strategies target people, places and products in each priority area and have been specifically chosen as many of these were identified as contributory or influential factors. This targeting is expected to make the greatest impact in reducing the overall number of electrical incidents. However, the people, places and products identified in each priority area are not exclusive and others may also be addressed as and when identified.

Performance measures

To ensure data and reporting integrity, the key performance measure used to evaluate Queensland's electrical safety performance is based on electrical fatality data reported to the Electrical Safety Office. Electrical fatality data also provides a reliable measure for comparative analysis of Queensland's performance against other jurisdictions. Additionally, this measure supports the Plan's five year goal of eliminating all preventable electrical deaths.

Key indicator	Target for 2014
Five year moving average of electrical fatalities per million population	Queensland electrical fatality rate to be below the national average

Fatality figures are however not the only measure of Queensland's electrical safety performance. Equally important is other trend data including serious electrical incidents and dangerous electrical events, both of which are reportable to the Electrical Safety Office and provide additional information to support evidence-based interventions. This data is not used as a key measure of performance as neither the Board nor the Electrical Safety Office can ensure the incidence or accuracy of reporting of such incidents. However, for the purposes of the following table it is assumed that there is a constant rate of reporting of these incidents and occurrences over time.

Trends drawn from this data provide a lower-level indicator of electrical safety performance and identify potential areas for future electrical safety interventions.

Trend indicators	Target for 2014
Number of serious electrical incidents/ dangerous electrical events attributable to contact with powerlines	Reduction over the life of the plan
Number of serious electrical incidents/ dangerous electrical events associated with electrical installations	Reduction over the life of the plan
Number of serious electrical incidents/ dangerous electrical events associated with electrical equipment	Reduction over the life of the plan