**Background:** Despite evidence supporting the efficacy of police enforcement of liquor licensing laws, limited enforcement of such laws has been reported. Limitations in police intelligence information regarding alcohol-related crime have been suggested to be a contributing factor. The aims of this study were to: a) determine the effectiveness of an implementation intervention in enhancing police recording of alcohol-related intelligence information; and b) to describe the prevalence of alcohol-related incidents based on the enhanced recording of such information.

**Methods:** A three-stage stepped-wedge implementation trial was conducted across the NSW police service. The intervention required police to collect and record additional intelligence information for attended incidents. The intervention implementation strategies included: leadership and consensus, IT system modifications, standard operating procedures, training, performance monitoring, implementation support staff, and communication. The effectiveness of the implementation strategies was measured in terms of the proportion of assaults recorded as being alcohol-related before and after the intervention for each of the three stages.

**Results:** Across the 45 month study period, 296,957 people were involved in an assault. Completion rates for the new alcohol intelligence items ranged from 89-99%. Prior to the introduction of the intervention, the mean monthly proportions of assaults recorded as alcohol-related were 33.2% (Stage 1), 29.0% (Stage 2) and 18.5% (Stage 3). Post-intervention, these proportions increased significantly to 49.7% (Stage 1), 47.0% (Stage 2) and 37.5% (Stage 2)(*P*<0.0001).

**Conclusion:** The results demonstrate the effectiveness and feasibility of an implementation intervention in enhancing the routine recording of alcohol-related intelligence information and thereby enhancing the capacity of police to apply an intelligence-led approach to the policing of alcohol-related crime.