higher extent. No gender difference in AIS or length of stay are found among adults.
Conclusions Even though burn incidence is highest among children, gender differences in burn incidence and management are mainly visible in adults. Results about men being transferred and women treated as outpatients to a higher extent in spite of similar AIS raise the question of hidden gender biases in the healthcare.

843 RISK FACTORS FOR UNINTENTIONAL HOUSE FIRE INCIDENTS, INJURIES AND DEATHS: A SYSTEMATIC REVIEW

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Background Unintentional house fires appear to be reducing but remain a serious public health concern, disproportionately affecting certain groups in population. To ensure preventative measures reach those at greatest risk, it is vital that risk factors for unintentional fires are identified; particularly in light of recent funding cuts in many Fire Services across high-income countries. However, the last review to be conducted in this area was undertaken over 15 years ago.
Methods To synthesise the evidence on risk factors for unintentional house fires, a range of bibliographic databases and grey literature were searched until October 2015. Key journals and reference lists were also hand-searched. To ensure the magnitude of risk could be quantified for each factor, only those studies that contained a comparison group, and undertook appropriate statistical analyses were included. A best evidence synthesis was undertaken instead of a meta-analysis due to study heterogeneity.
Results This review identified 12 studies that investigated a variety of potential risk factors and outcomes that fulfilled the inclusion criteria. None of the identified studies were deemed high quality, but the available evidence suggests the following factors may be associated with fire risk: age, gender, socio-economic status, race/ethnicity, disability, household ownership, household composition, property characteristics, smoking, alcohol/drug use, fire safety practices and marital status. It also appears that whilst older and disabled residents are more likely to suffer an injury or fatality in the event of a fire; they are less likely to ignite a fire in the first instance.
Conclusions There is a surprising paucity of high quality studies examining risk factors for house fire incidents, injuries and deaths. Further high quality studies, adopting standardised methods are required to permit synthesis, and to develop a firmer understanding of unintentional house fire risk factors.

844 TREND AND CURRENT CHARACTERISTICS OF BURN FROM CHINESE NATIONAL INJURY SURVEILLANCE SYSTEM FROM 2006 TO 2013

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Objective To understand the trend and current characteristics of burn in china by using data from the Nation Injury Surveillance System (NISS) and the results of the study would provide basis of corresponding intervention strategies and decision-making.
Method Descriptive analysis was applied to display characteristics of burn in 2013 and trend of burn from 2006 to 2013.
Results The number of burn increased from 2006 to 2013 while the proportion of burn among unintentional injuries did not change much during these years. Number of burn in male was higher than in female in the same years. However, proportion of burn among unintentional injuries in female was always slightly higher than that in male. The proportion of burn was quite high in young children comparing with other age groups. In 2013, the proportion of burn in 1–4 years old children was 8%, which was much higher than that in other ages (Average proportion for all ages was 2%). Burn ranked the third cause of child unintentional injuries for children in the age of 1–4 y. The major place that burn took place was home (64%). Recreation activates (54%) was the main way of causing the burn to happen. The most common parts of body that burn involved were upper limbs (34%) and low limbs (27%). 73% of burns were minor and 75% went home after the treatment. The proportion of serious burn had negative correlation with the level of education.
Conclusion Even though burn ranked first some places among all injuries. It should not be ignored, especially for young children. Caring children by caregivers was important for preventing child burn.

845 COST-EFFECTIVENESS ANALYSIS IN FIRE PREVENTION

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Background The recent cuts in public resources has put also the effectiveness of fire prevention programs under closer scrutiny. Fire prevention is one of the main functions of the regional fire departments and under growing rivalry for declining recourses. Thus, better methods in increasing or optimising effectiveness are desperately needed. This research is the first serious attempt to apply CEA in evaluating the effectiveness of fire prevention program, in Finland and internationally.
Methods Cost-effectiveness analysis (CEA) is an economic method for comparing the relative costs and effects of alternative or exclusive courses of actions. CEA is widely used in evaluating various public programs, such as health and social services, but it has not been in standard use in evaluating fire prevention programs. This is partly because of the ambiguity of the expected impacts, but also because of shortcomings in data collection and process designs.
Results The firms aim is to detect general feasibility of CEA in decision making under budget constraints, taking into account all welfare and equity effects and other externalities involved. This provides methodological guidelines for implementing CEA in evaluating and optimising the effectiveness of fire protection. Second, the study aims to test the virtues of CEA by implementing it in selected case studies. This yields practical guidelines and processual suggestions for information based management in fire services.
Conclusions The research is still a work in progress. The conclusions of the analysis is expected to be completed by the end of spring 2016.