The purpose of this study is to describe the trend in fatal home and leisure childhood accidents (HLA) and to examine the trend in relation to the most common groups of mechanism of injury for this category of fatal accidents.

The most frequent causes of death were drowning and suffocation counting for respectively 31% and 30% of the total mortalities. For the other mechanisms of injury, we found a tendency to an increase in the prevalence by 0.7% per year. The mortality rate had dropped from 6.42 per 100,000 in 1975 to 2.23 per 100,000 in 2000. The total decline within the period was 65%. The decrease in the incidence rate was mainly seen during the first half of the period, and there has been stagnation in the last 5 yrs. The decline in HLA was 76%.

Mechanism of injury: In the Poisson regression analyses of HLA, when adjusted for age and gender, we found an average decrease of 1.4% per year in the prevalence of fatal fall accidents across the 26 yrs. (p<0.0001). For drowning and suffocation the decrease were 2.70% (p<0.0001) and 2.69% (p=0.0004), respectively. For fire/smoke we observed a tendency to an increase in the prevalence by 0.7% per year (p=0.4586), and an inclination for “Other” to decrease by 0.6% per year (p=0.3727).

Place of occurrence and products: Drowning: 26% of the 263 drowning accidents took place at the seaside. Among infants 80% of fatal accidents occurred in wash-basins and bathtubs. Garden pools made up a special risk for toddlers. Toddlers without supervision were at higher risk of drowning in lake/stream in the countryside or in parks. As children grow older the drowning accidents more often took place while swimming in e.g. water holes, or because they fell through the ice.

Suffocation: Many children choked on food or vomit in the respiratory tract. However, some of these children were handicapped or enfeebled in other way. For the youngest children both beds and baby caring equipment made up a special risk. In children in the play period we observed deaths due to collapsed dugouts and suffocation in silos with grain or bulk goods.

Fire/smoke: Fire accidents often took place in connection with house fires while the children were asleep. Playing with matches and cigarette lighters were involved in some of the accidents.

Falls: 68% of the falls were from greater height, primarily toddlers that fell from a window. In total 27% of the fall accidents were caused by falls from a window.