Background: There are around 19,000 fatal injuries annually in Argentina. Since 1983, deaths due to self-inflicted (SI) injuries were more frequent than Interpersonal (IP) fatal injuries. However, around 12–14% of injuries were classified under Undetermined intention (UD).

Objective: To identify characteristics of undetermined causes of deaths and to describe the relationship between the mechanism of injury by age and sex associated with intentionality of the event.

Methods: Data on mortality health statistics from 1996 to 2010 were used (N=125,832). Included Mechanisms were: Falls, Drowning, Other threats to breathing (OTB), Fire, Firearm, Sharp object (SO), Machinery, Gases, Pesticides, Other poisons (OP). A factorial analysis of multiple correspondences and cluster analysis with one mixed classification and centroid was made. Active variables: age, sex, mechanism, occurrence place. Illustrative variables: intentionality.

Results: The five first axes were conserved (36.75% of the inertia). A global typology was obtained in five classes which non-exclusive characteristic modalities were:

- Class 1 (N=41,870): Firearm, SO, OP; 10–50-years-old; Street, Unspecified place; IP or UD. Class 2 (N=7,781): Falls, Gases; Female; older than 60 years; Home; Unintentional (U). Class 3 (N=43,596): OTB, Gases; Male; older than 40 years; Home; (SI). Class 4 (N=17,262): Fire, OP; younger than 10 or older than 60-years-old; Unspecified place; (U). Class 5 (N=9,966): Drowning; Male; younger than 20 years; Other specified place; (U). 57% of UD was in class 1, and 20% in class 3 (p<0.0001).

Conclusions: The redistribution of undetermined causes of death according the injury mechanism, age and sex could be useful to obtain more accurate information of specified intentional deaths.