

*STATISTICAL
ANALYSIS OF
BUILDING FIRES IN
THE CITY OF
OPORTO - 1996-
2006*

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OBJECTIVES OF THE RESEARCH WORK

- ❑ **Collection, analysis and processing of information about urban fires in the city of Oporto, Portugal, between 1996 and 2006.**

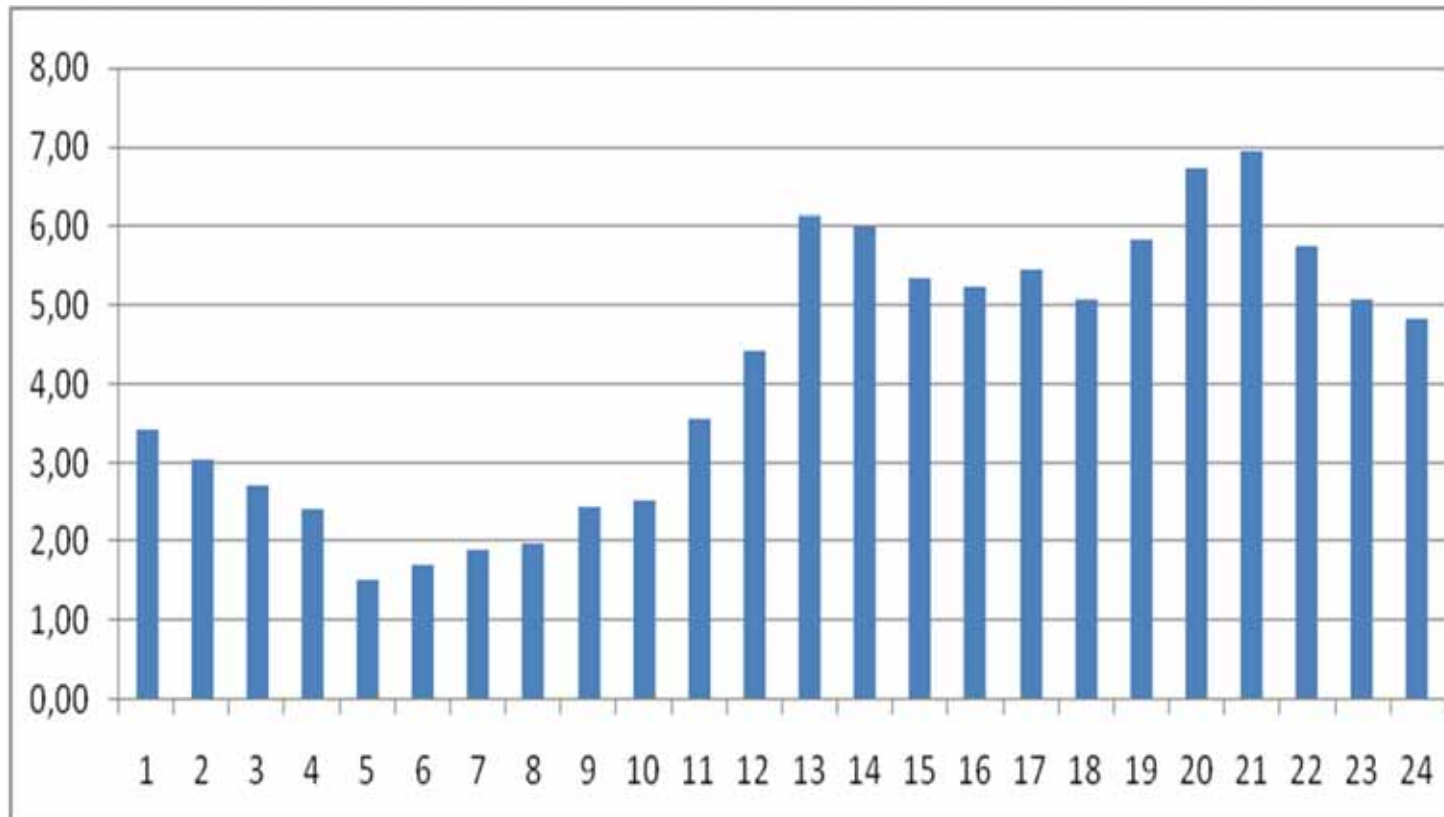
- ❑ **In order to:**
 - better understand and characterize the reality of urban fires;

 - contribute to the development of a probability model of fire occurrence.



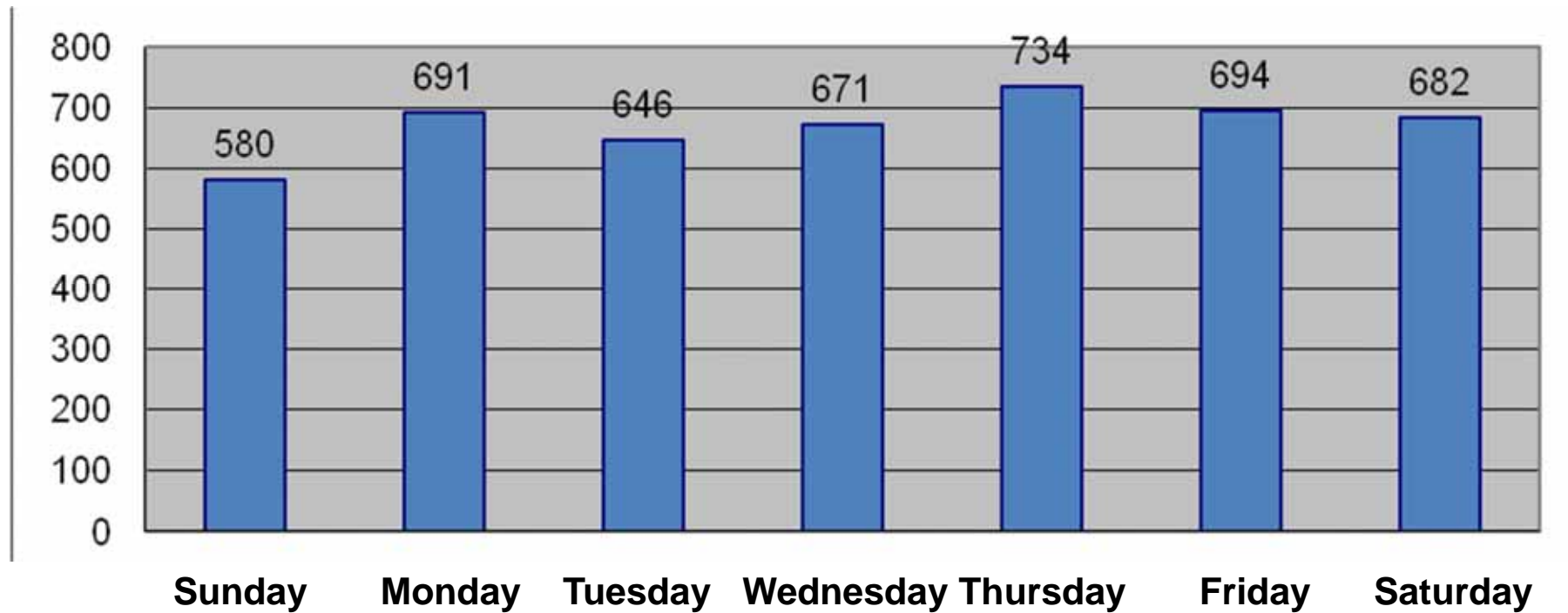
DISTRIBUTION OF FIRES IN THE DAY

(in %)



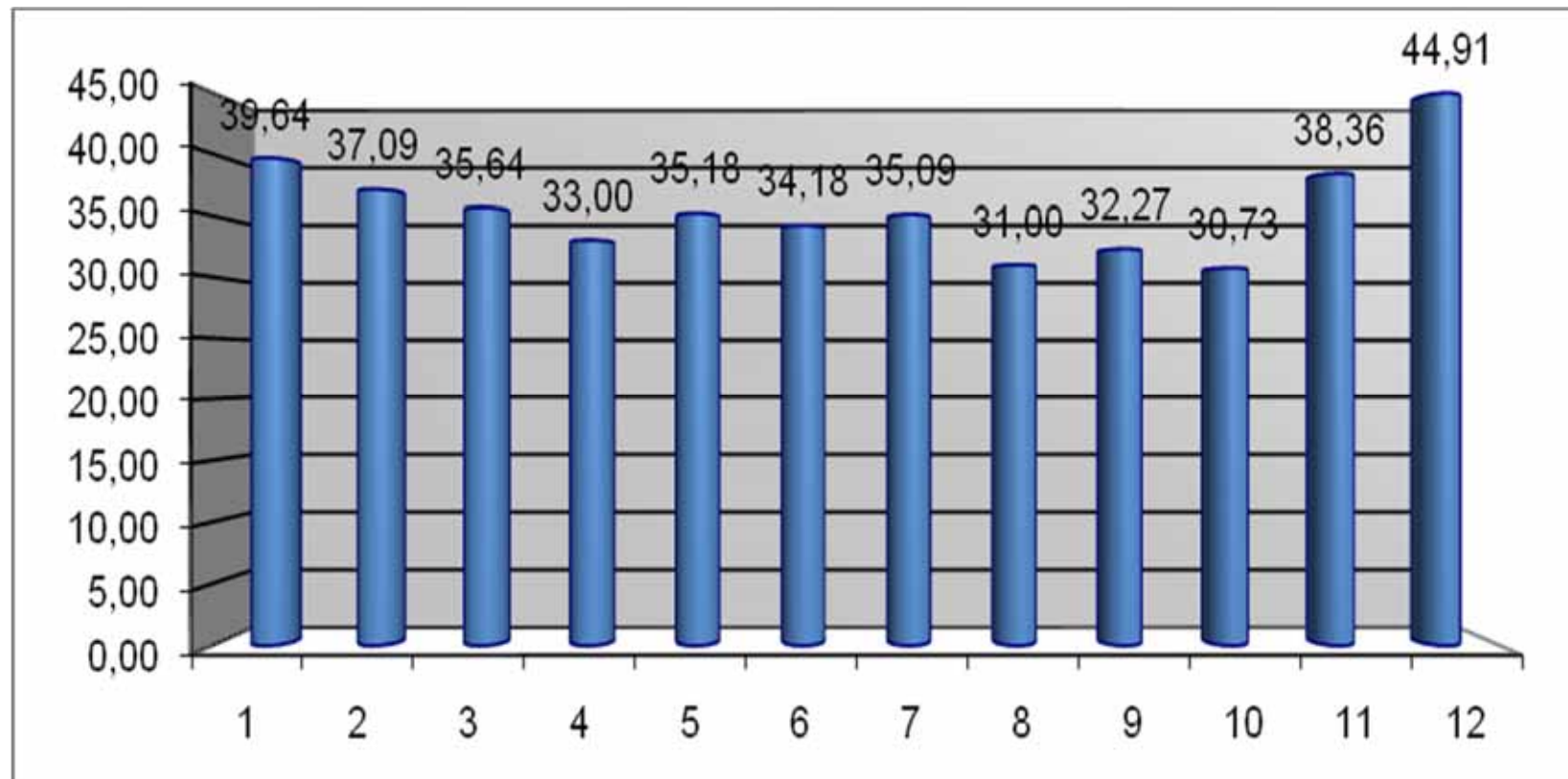
DISTRIBUTION OF FIRES IN THE WEEK

(in absolute values for the period)

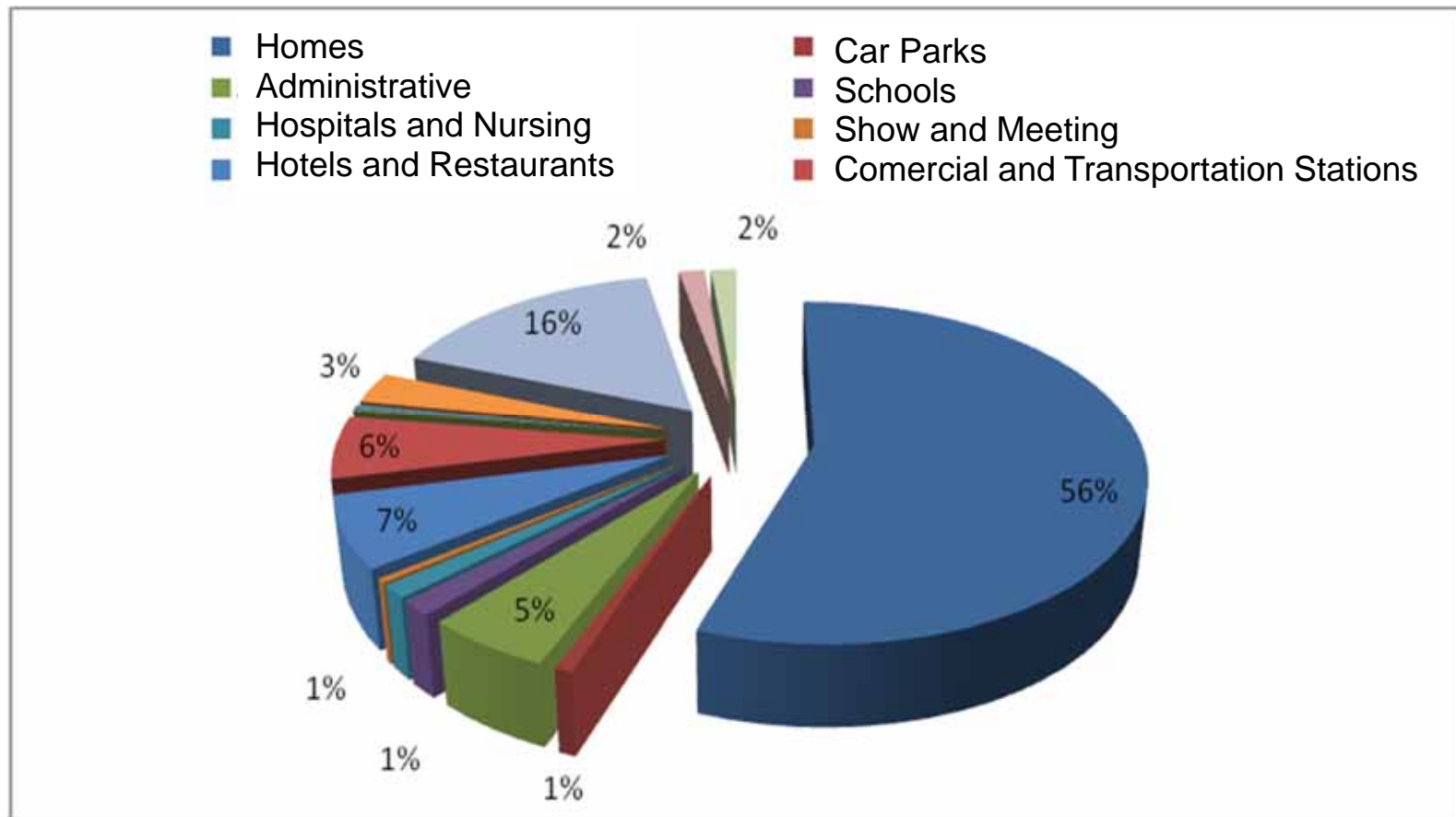


DISTRIBUTION OF FIRES IN THE YEAR

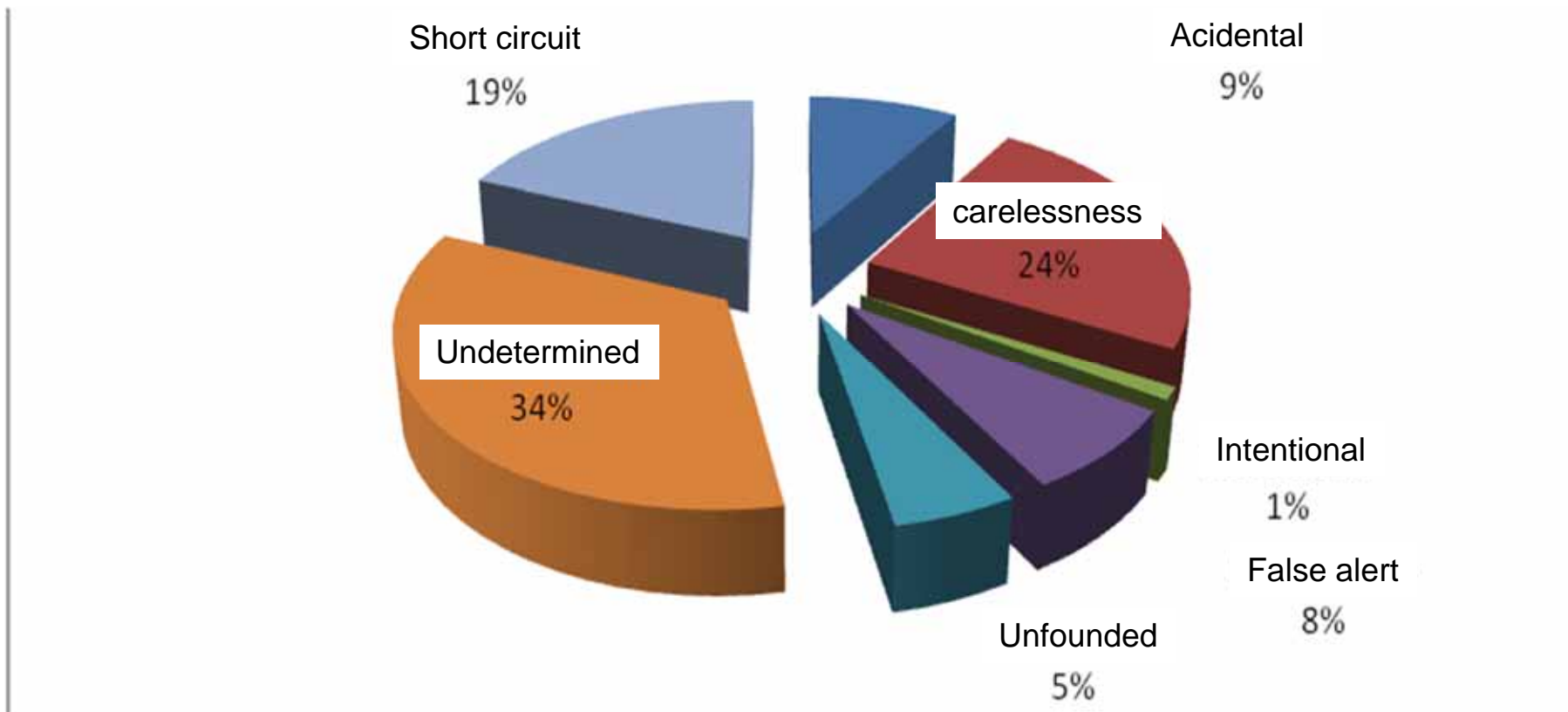
(In mean values)



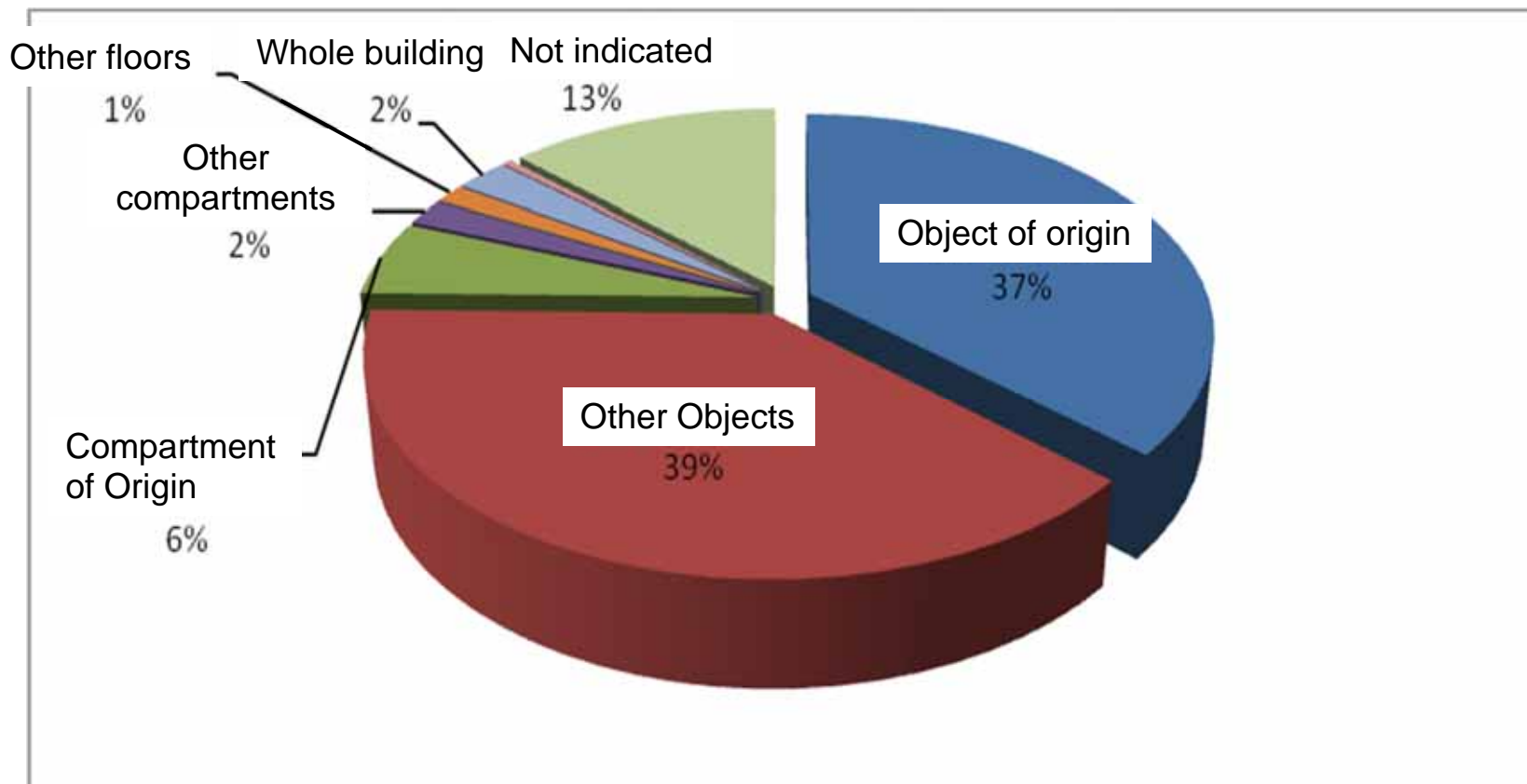
DISTRIBUTION PER USE - TYPE



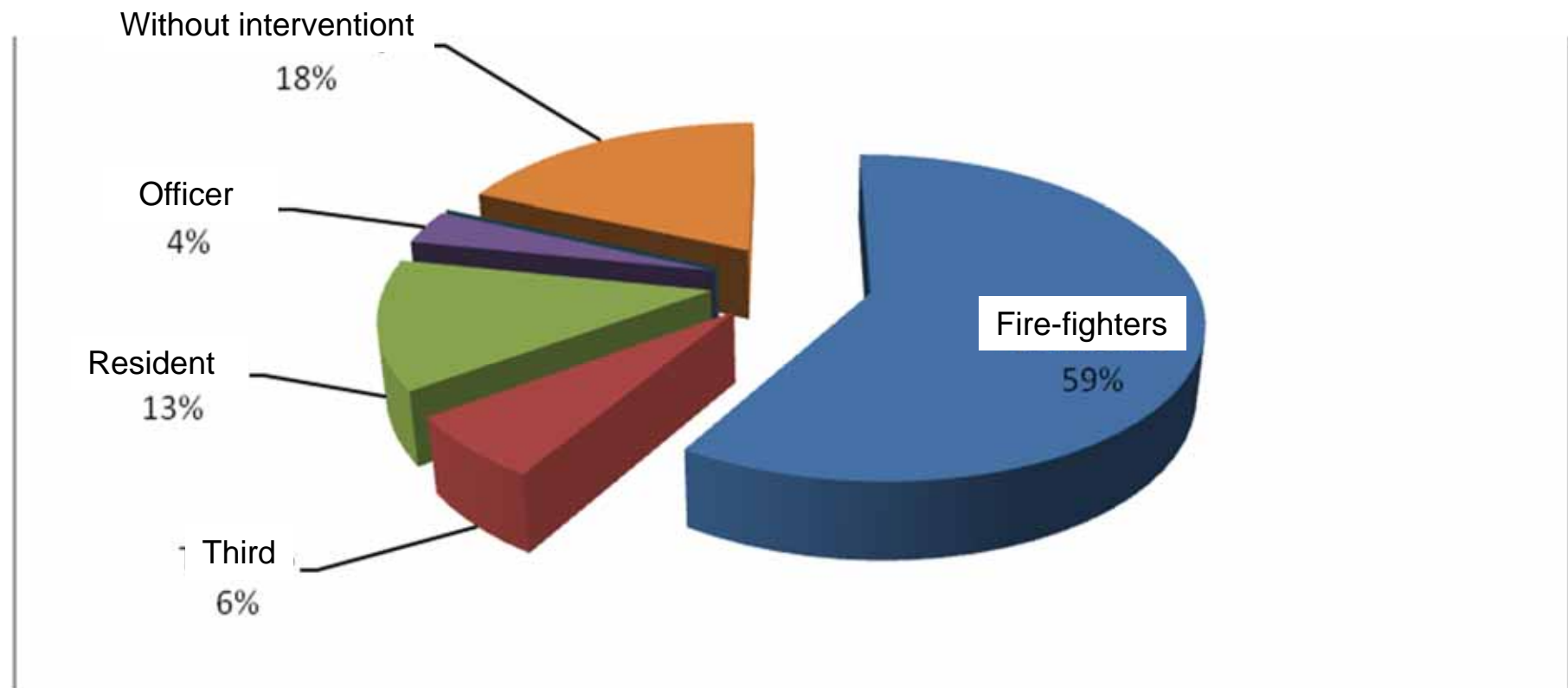
DISTRIBUTION PER CAUSES



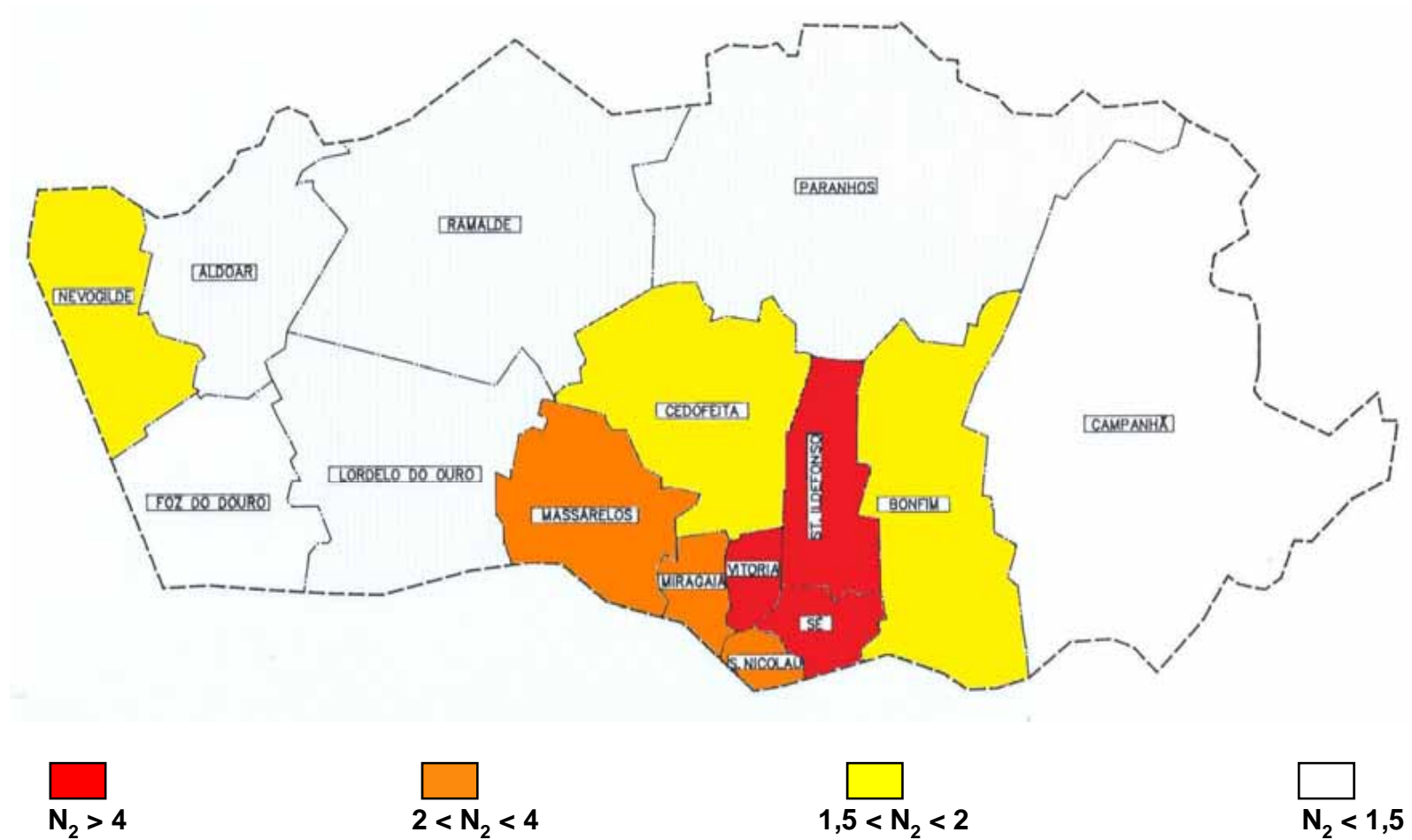
DISTRIBUTION PER PROPAGATION TYPE



DISTRIBUTION PER EXTINGUISHING MEAN



NUMBER OF FIRES PER THOUSAND OF INHABITANTS



VICTIMS OF BUILDINGS FIRES

- **16 deaths in 14 fires:**
 - ✓ 14 in homes and 2 in abandoned buildings;
 - ✓ 15 residents and 1 firefighter;
 - ✓ 50% in the period of 0-9 hours;
 - ✓ 43% in the bedroom or living room

- **166 injured in 128 fires:**
 - ✓ 56% residents;
 - ✓ 16% officers;
 - ✓ 11% neighbors;
 - ✓ 10% firefighters.



CONCLUSIONS

- ✓ **Should be implemented**
- ✓ Preventive measures at homes of:
 - Neediest families;
 - Elderly and young children.
- ✓ Abandoned buildings or with undue occupation.
- ✓ kitchens of restaurants.
- ✓ Historical areas:
 - Improve safety conditions;
 - Raise awareness among residents for prevention.
- ✓ Creation of a national system of data collection and analysis of urban fires
 - Proposal of a form to be used by fire-fighters.

Obrigado for your attention



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