

# **Statistics of Accidents in the Portuguese Elderly Population: A Short Review**

**Authors:**

António Augusto Ribeiro

*aaribeiro65@iol.pt*

Miguel Corticeiro Neves

*miguel.neves@unisla.pt*



**Risk Management of the Elderly Population Activities**

# Statistics of Accidents in the Portuguese Elderly Population: A Short Review



## Introduction

- **"Aging"** now appears associated with the terms **quality of life and elderly health**, while maintaining physical, psychological and social autonomy, and where the elderly are integrated into safe societies in which they can assume full citizenship.
- **"Active"** is not only linked to the ability to be physically active or to be part of the labor force, but also **implies an individual involvement and participation** in the various forums (social, cultural, economic, civil and spiritual).





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## Introduction

### Collective aging in Portugal

- The evolution of the **average age of the population** in recent years has been even sharper than in Europe: in 1950 was 26 years, in 2010, 41 years, and may reach 50 years by 2050.
- **People 65 or older**, the elderly (WHO classification), are more than two million in Portugal and **represent 18% of the total 10.5 million residents**, according to the latest national census (INE, 2011).
- Another meaningful data within the context is that the **elderly 75 years or older** are nearly one million, **9.4% of the population**.





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## Introduction

### Collective aging in Portugal

Regarding to [employment and the labor market](#), individuals in the 65 or older age group represent:

- **6,1%** of total employees working in the three sectors of economic activity;
- **5,3%** of the active population;
- **33%** inactive individuals.





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## Materials and Method

Data collection focused on gathering information to characterize the **elderly population in Portugal** within the following aspects:



- Perform the analysis of the type, frequency and severity of accidents;
- Determine the trend of accidents, as a key element to understand the magnitude of the problem;
- Analyze risks and develop management systems in the various professional, domestic and leisure activities involving elderly;
- Define interventions that are more directed to this age group through an appropriate development of management systems of OSH.

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## Materials and Method

The study covered the following **five steps**:

- **Step 1** - Definition of age group (WHO and demographic information);
- **Step 2** - Identification of activities with greatest participation - INE  
(The work areas, formal and non-formal participation in society, household chores and leisure activities, and mobility and transport);
- **Step 3** - Review of information gathered from authorities, institutes and public offices, papers from conferences, open repositories and online sites.
- **Step 4** - Overall assessment of the accident type, frequency and severity;
- **Step 5** - Register the developments seen in recent years for future analysis.



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## Materials and Method

Regarding literature survey, data of the following bodies and authorities were consulted (Step 2 and 3):

- Occupational Safety and Health Authority (ACT),
- National Road Safety Authority (ANSR),
- Strategic Planning Office (GEP),
- National Statistics Institute (INE/PORDATA),
- National Health Institute Dr. Ricardo Jorge (INSA).





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## Materials and Method

The [online searches of articles and studies](#) attended the subject within the **national context**:

Searches were performed using several combinations of keywords, always keeping the term **“accident”** and **“elderly”**



- Review of academic papers work was guided by [areas of knowledge](#), accessed through open repositories of PO higher education establishments;
- Abstracts and full-papers presented at [conferences](#) and [published in journals](#);
- Studies conducted by researchers in the active population aging areas (authorities, institutes, public offices and associations).





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## Results and Discussion

### Information on Statistics of accidents

The literature review conducted on various activities accidents in the elderly population, **brought together the following data:**

- The Portuguese elderly population, demographic change (INE/PORDATA 2000-2012) and its condition relative to employment, including active and inactive elderly (INE, 2013);
- Road accidents, updated monthly, depending on the type occurrence and incidence by District (ANSR, 2013);





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## Results and Discussion

### Gathered data (Continue):

- Domestic and leisure occurrences, within the period 2006-2008 (INSA, 2010);
- Fatal on-the-job accidents, recorded annually (ACT, 2013);
- On-the job accidents in 2010 (GEP, 2012),





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## Results and Discussion

The [review of academic work](#) was guided by areas of knowledge, within programs offered at Portuguese universities and institutes:

- Health courses - geriatrics, nursing and psychology;
- Gerontology and social security;
- Physical education and ergonomics;
- Occupational risk prevention.

## Studies and Articles

- [167 were extracted](#), and of these, [two were selected](#) because they provided analyses that took the country's reality into account  
(a study about job safety in the traditional Portuguese fisheries and another on the falls with femoral neck fracture among the elderly).



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## Results and Discussion

### Studies and Articles

- Most were excluded because they are repeated, the sample is reduced or does not specify the age group (work, daily life and participation in society).
- The studies on the activities of the elderly population generally are focused on specific risks, particularly psychosocial risks, risk of falling and musculoskeletal disorders risk factors.



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## Results and Discussion

### Data Analysis and Statistics

Record of occurrences involving the elderly population in Portugal:

- Statistical information on accidents provided by various agencies focused, in particular, on work accidents (only a part of the population), **leaving out most of the activities** of the elderly;
- The available records are supported by parameters that meet the type of economic activity, enterprise size, professional group, deviation, material, but not present data that support the characterization of the injured person (age, gender ...);





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## Results and Discussion

### Data Analysis and Statistics

#### Record of occurrences (continue):

- Most situations, data was not updated (GEP/INE/INSA); **for example**, the data on in-home and leisure accidents – information appropriate - **ADELIA** (national accident surveillance system), that has no updated data since 2008.
- **Traffic accident statistics** (ANSR) are updated on a monthly basis.
- The **fatal on-the-job accidents** investigated by the Workplace Safety & Health Authority (ACT), are updated after investigation completion.



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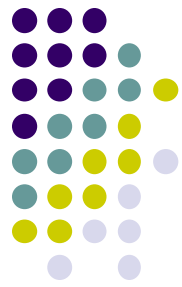


## Results and Discussion

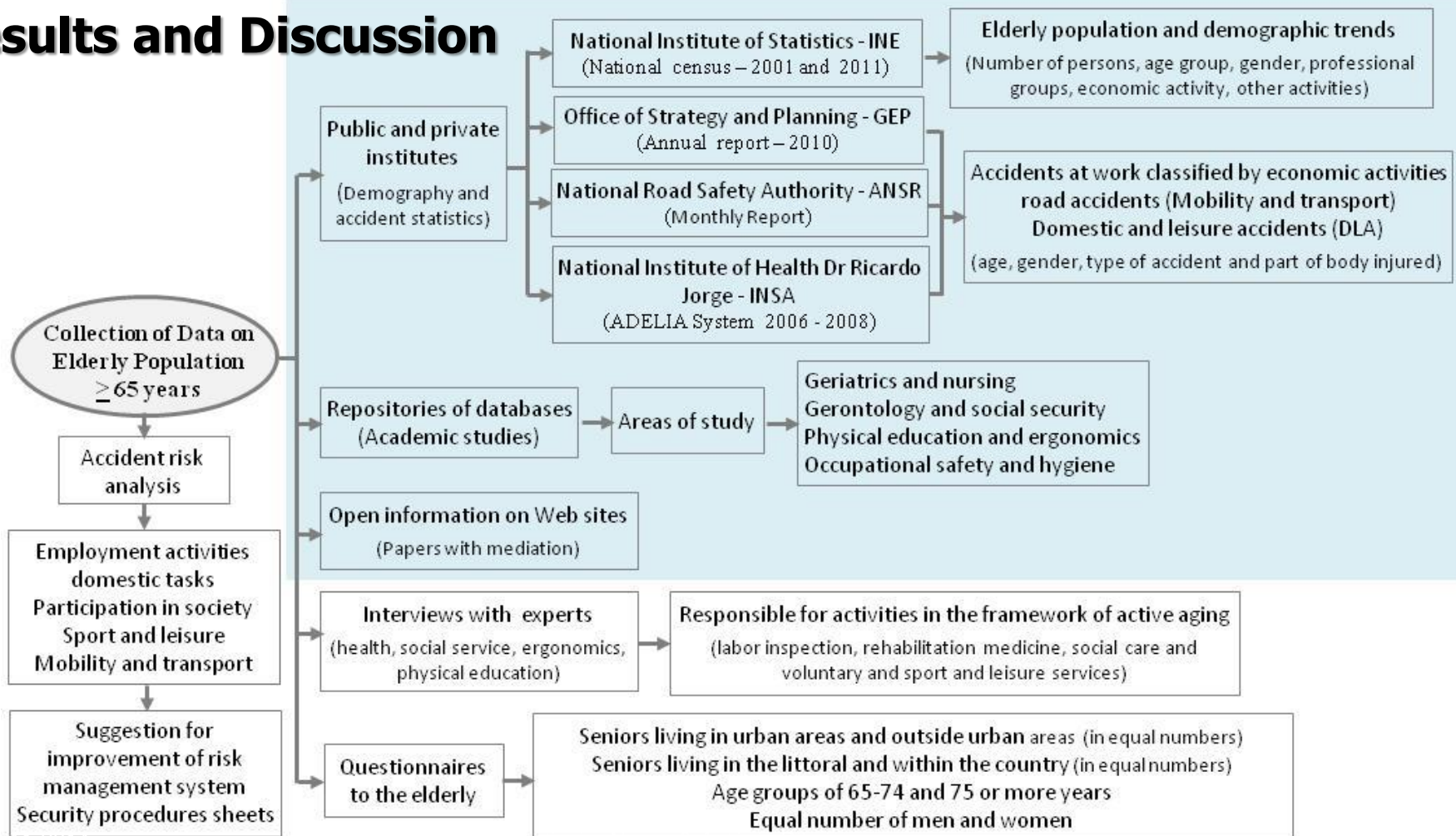
The accident data used in studies of aging:

- Are directed to the analysis of specific risk exposure of the elderly population, particularly psychosocial risks, risk of falling and musculoskeletal disorders;
- Are carried out among elderly support services or within elderly social support facilities, with limited population samples (case studies);
- Authors use data gathered from international organizations that do not reflect the Portuguese reality to characterize the activity and carry out risk analysis (ILO, EU-OSHA, WHO);
- Or existing records of occurrences produced and kept by the institutions were the study is being conducted.

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## Results and Discussion



**Figure - Process of research and analysis of accident statistics by age group**

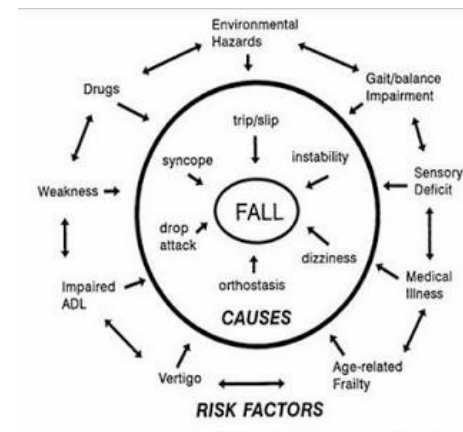


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## Final Remarks

- Currently, in Portugal, the elderly are **over than two million people** (18% of the population), and they perform several activities as diverse as desired (active aging).
- Individually, the elderly have functional, psychological and social conditions that **characterize them as a vulnerable group when exposed to risk**, and this is reflected by the increasing incidence of accidents.



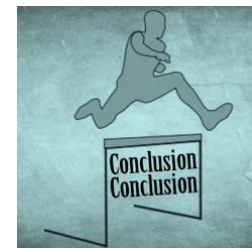


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## Final Remarks

- Existing data are insufficient to establish a trend for frequency and severity rates of accidents, and also to conduct a more detailed analysis of accident causation when the victims are elderly.
- The human factors and age variable among injured persons are fundamental elements in the causality analysis of accidents and proposed measures for accident reduction (appropriate information ).





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STATISTICS

## Final Remarks

The statistical data should consider the occurrences in all activities and not be a unique legal requirement to work activity:

- Attending the importance of human factors and the age of the injured person in the causation of the accidents and the proposed measures;
- Respond to the information needs of researchers and professionals working with elderly people daily;
- Facilitate detection of changes in the level of risk activities and products;
- Support the need for legislation and standardization of risk management issues in the activities of this age group.



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