

How can we use research to improve the quality of health care



Paula Kokkonen

Mayor for Social Affairs and Public Health
Helsinki, Finland



Ottawa

Helsinki

Finland

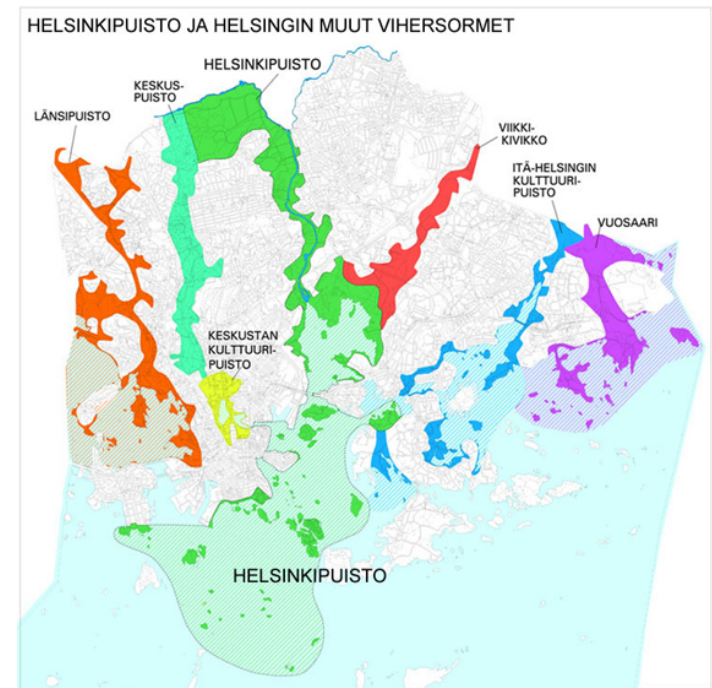
- 5,3 million inhabitants
- density 15 persons / km²
- length 1140 km
- width (max) 528 km
- area 338 145 km²
- forest 70 %, water 10 %



Helsinki

- 560 000 inhabitants
- Average density 2993 persons/km² (variation 5306 – 1761)
- length 40 km
- width 20,7 km
- Area 686 km², out of which is water 73 % and 9% forest and parks (126 km²)

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Helsinki in the summer



Helsinki in the winter



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The many basis for practice

- Traditional basis
 - rituals
 - unverified rules
 - organizational culture
 - customs
 - opinions



- Regulatory basis
 - legislation
 - economic requirements
 - internal organizational policies
 - regulatory provisions



- Philosophical / conceptual basis
 - mission
 - vision
 - values of organizations
 - strategies
 - professional practice models
 - untested conceptual frameworks
 - ethical framework
 - professional codes



- evidence-based practice
 - research findings
 - studies
 - syntheses
 - research reviews
 - meta-analyses



- Strong evidence
 - data on actual performance and quality
 - evaluations
 - peer reviews
 - survey results
 - consensus recommendations of rec. experts
 - affirmed experience



The long and winding path from research finding to quality improvement

Academic scientific communities
operate under their own logic



- Scientists for scientists in scientific journals
- popularize findings; language
- obstacles: culture, expertise, structures
- organizational culture
- professional cultures
- political decision-makers
- scientists – clinicians – decision-makers



Electronic communication >< finding relevant information

Linking scientific data to
decision-making

Research data >< media
focus: isolated cases

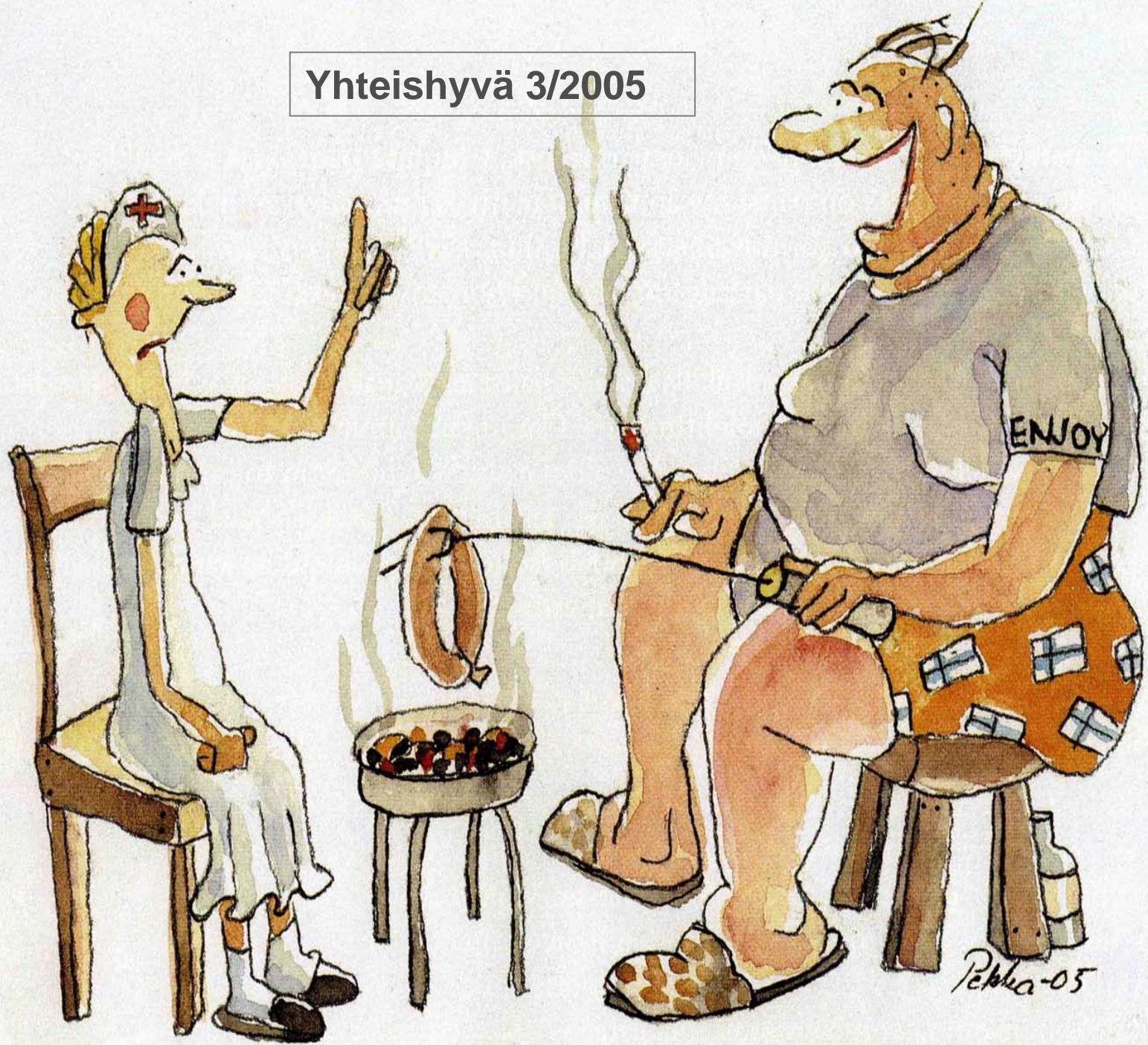


Patients

- views, values
- desires, emotions
- circumstances
- approval
- consent
- HEALTH ?

Information alone is not sufficient to bring about change

Yhteishyvä 3/2005





Helsinki – some key figures

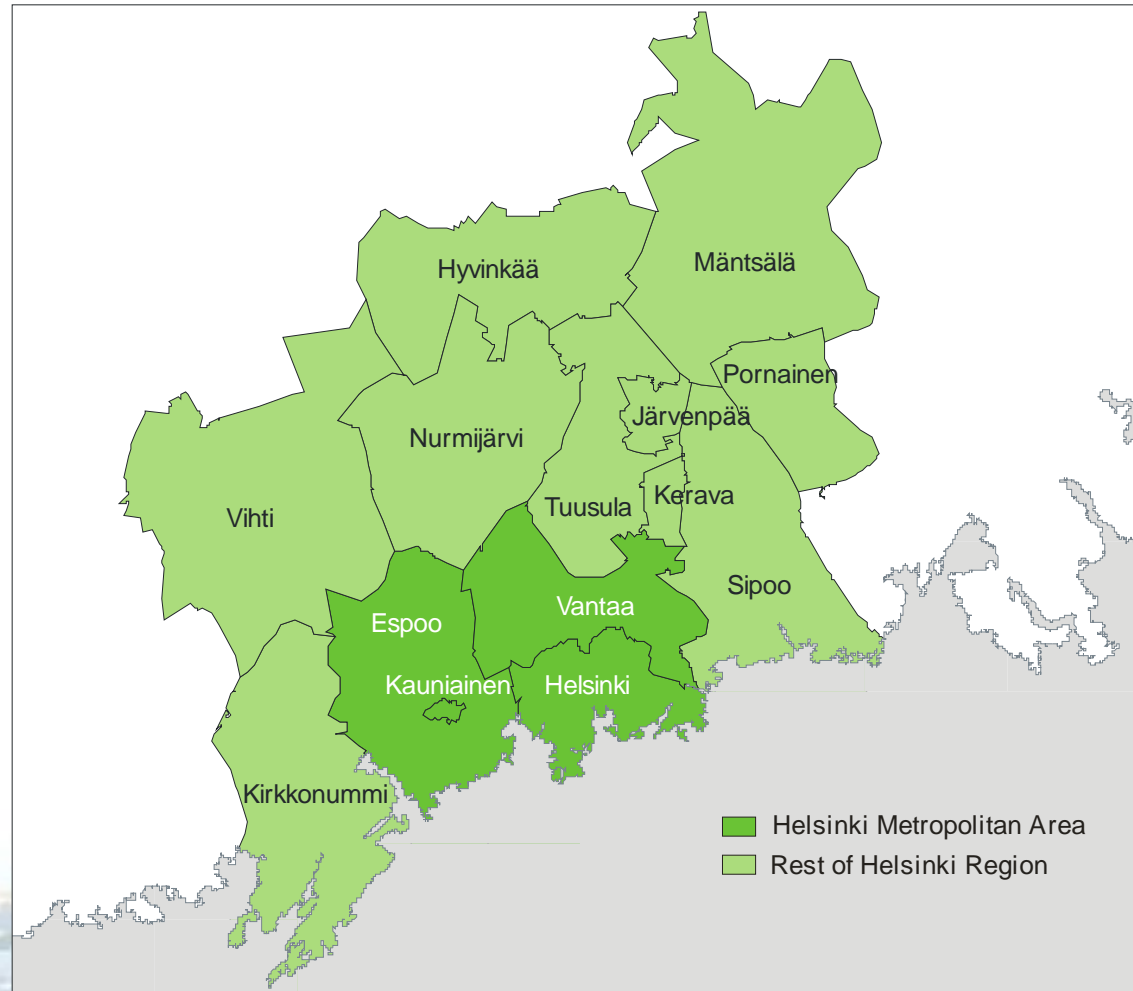
- **Population 2007** – Helsinki and the region
 - City of Helsinki: 564 000 inhabitants
 - Helsinki Metropolitan Area (four municipalities): 1.0 mio
 - Helsinki Region (14 municipalities): 1.3 mio

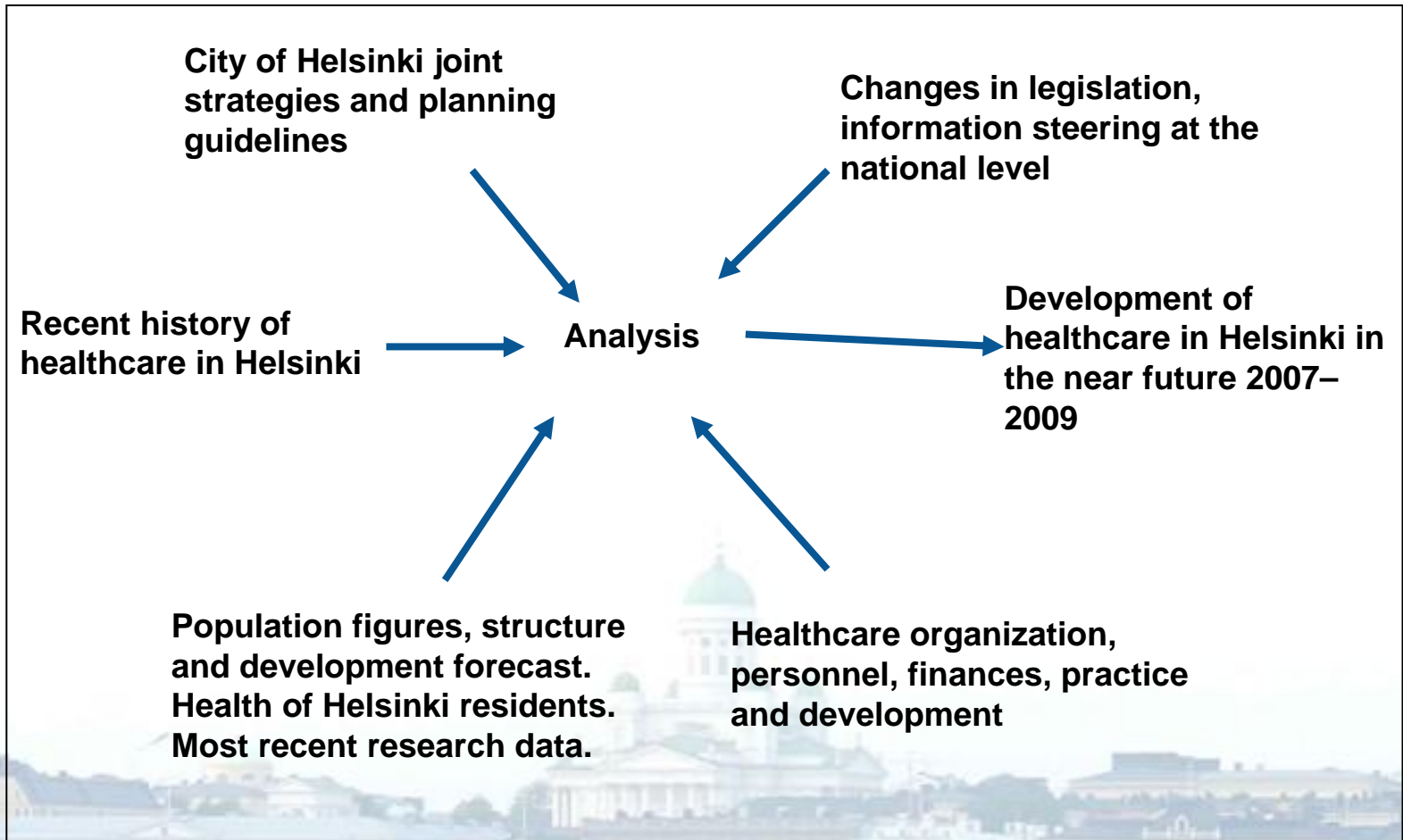
Helsinki

- population density (persons/sq.m): 3 000
- proportion of one-person households: 49 %
- languages: Finnish 86 %,
Swedish 6 %, other languages 8 %



Helsinki Region







Helsinki – some key figures

- Share of 15-year-olds and older with a university degree: 23.0 %
- Employment rate: 74.0 %
- Unemployment rate: 7.9 %
- GVA per capita (Helsinki Region): 36 000 €



Helsinki – some key figures

Population structure and characteristics

- 65 years old and older will grow from present 78,000 to 120,000 by 2025, accounting for 50 per cent growth.
- 75 years old and older will grow rapidly from 2020 and onwards. They are predominantly living alone, especially female dwellers.
- The support ratio of Helsinki will decline from the present 2.6 persons of working age for every dependent to 1.9 by 2030.
- By 2050 Europe is expected to have the lowest support ratio, at 1.4 persons of working age for every dependent.

The **support ratio** is calculated as the ratio of persons aged 15 to 64 over the sum of the number of children and persons aged 65 or over.



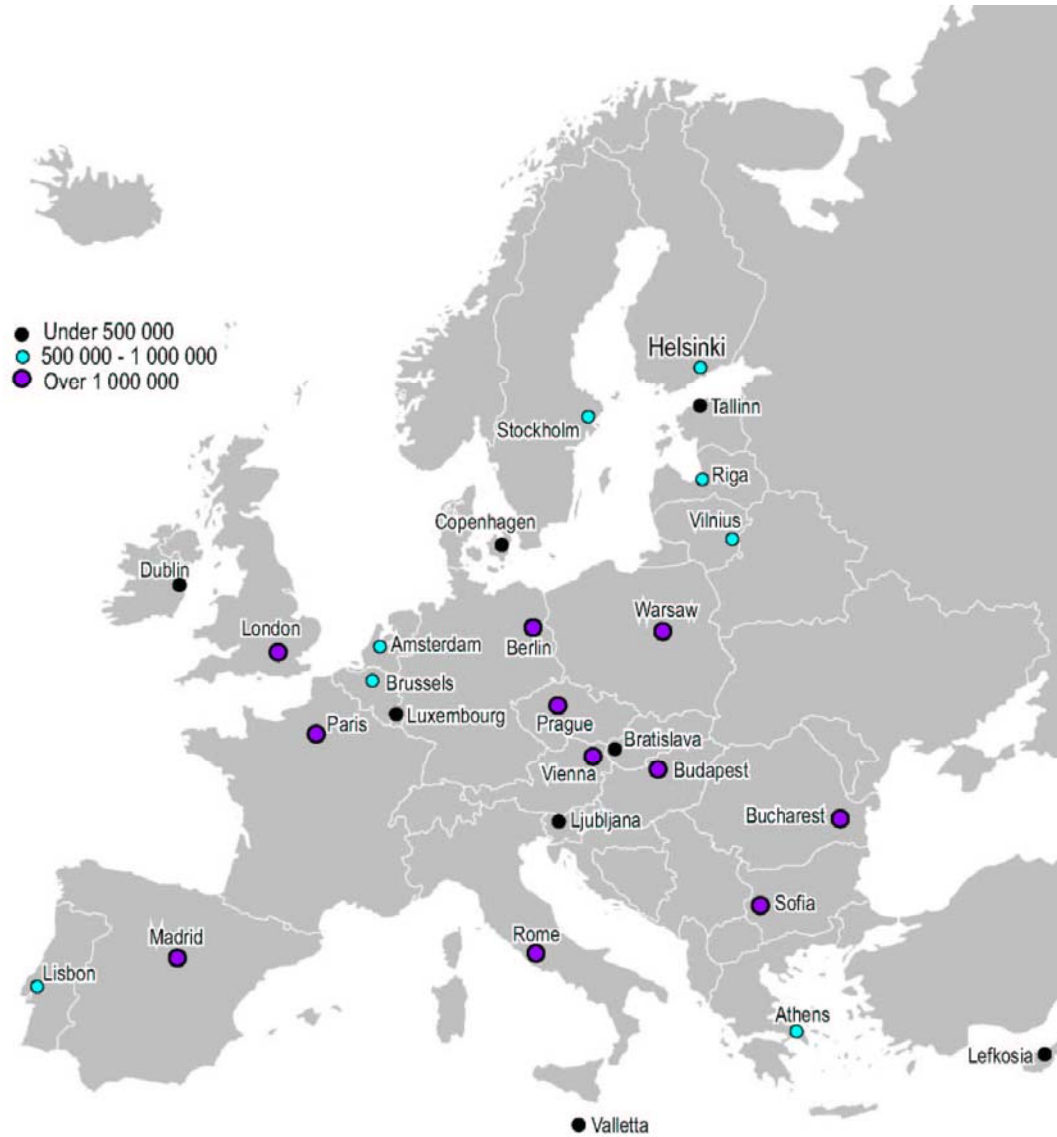
Helsinki – some key figures

Population structure and characteristics

- **Life expectancy**

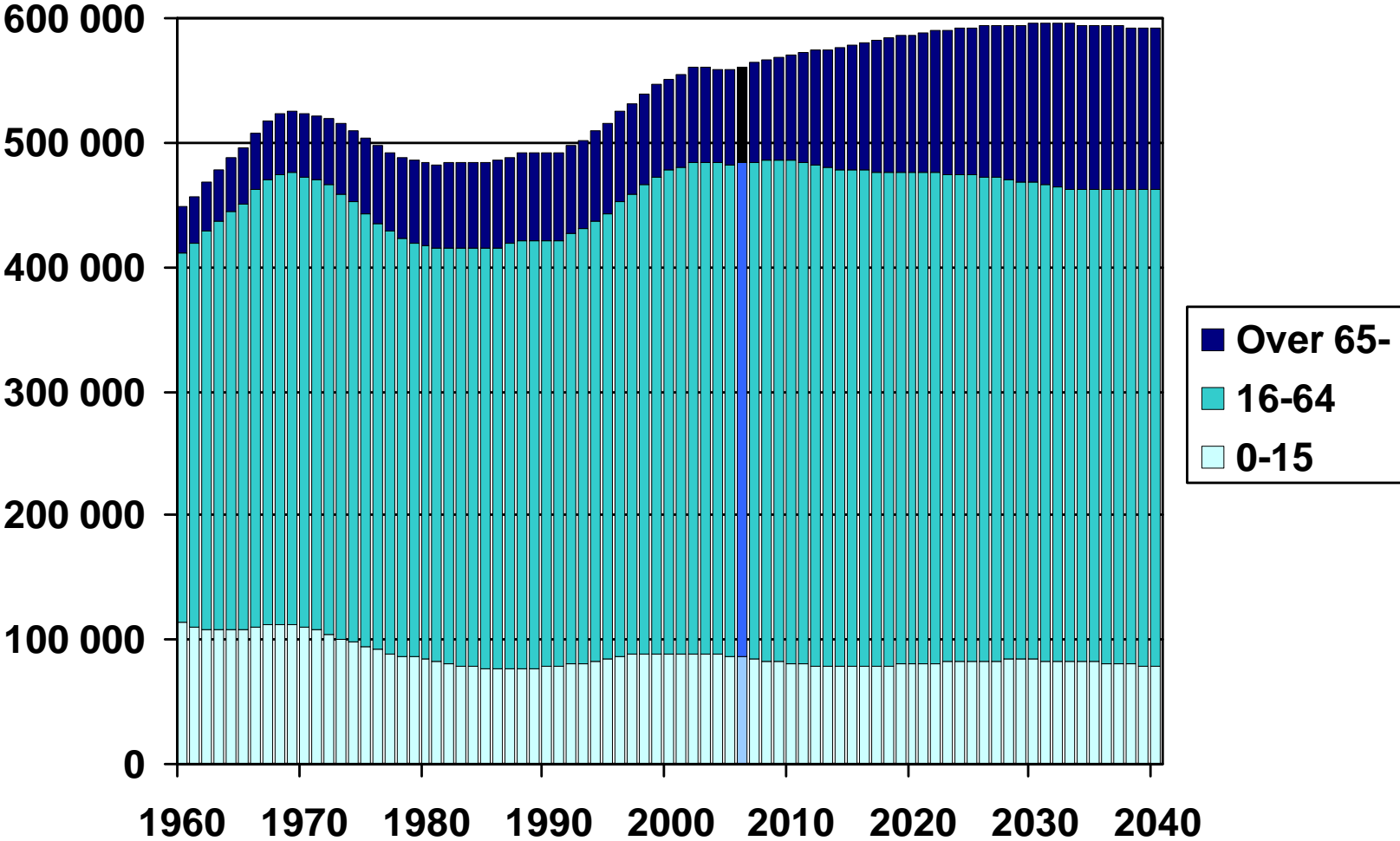
	Men	Women	All pop.
Helsinki	74 years	81 years	78
Finland	75 years	82 years	78
- **Percentage of population (persons) having received living allowances is 10.3**
- **Population with disposable income at less than 60 % of the median was 8.5% on average in 1995, and 9.8 % in 2000, and grew to 13.1 % in 2004. Income disparities have grown.**

Population in capital cities in EU27

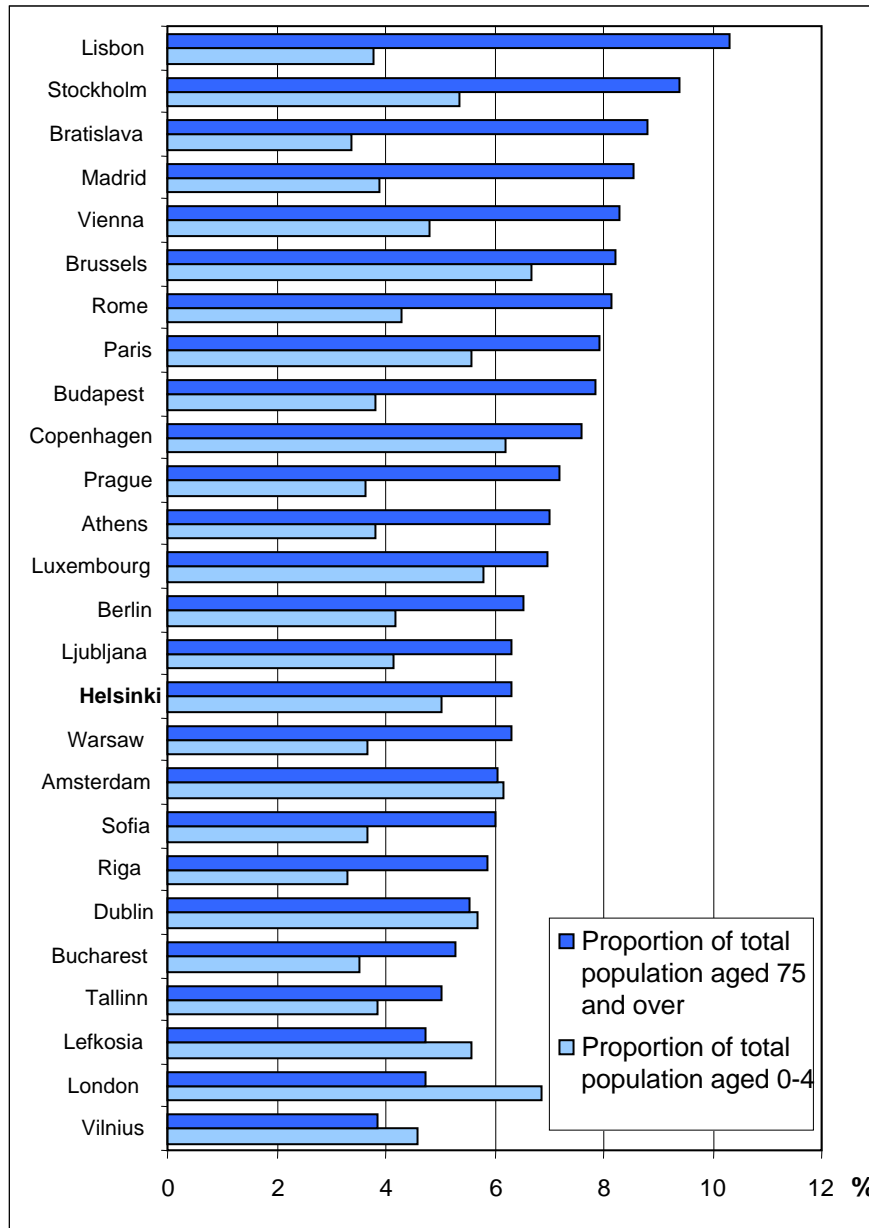


Source: Eurostat, Urban Audit

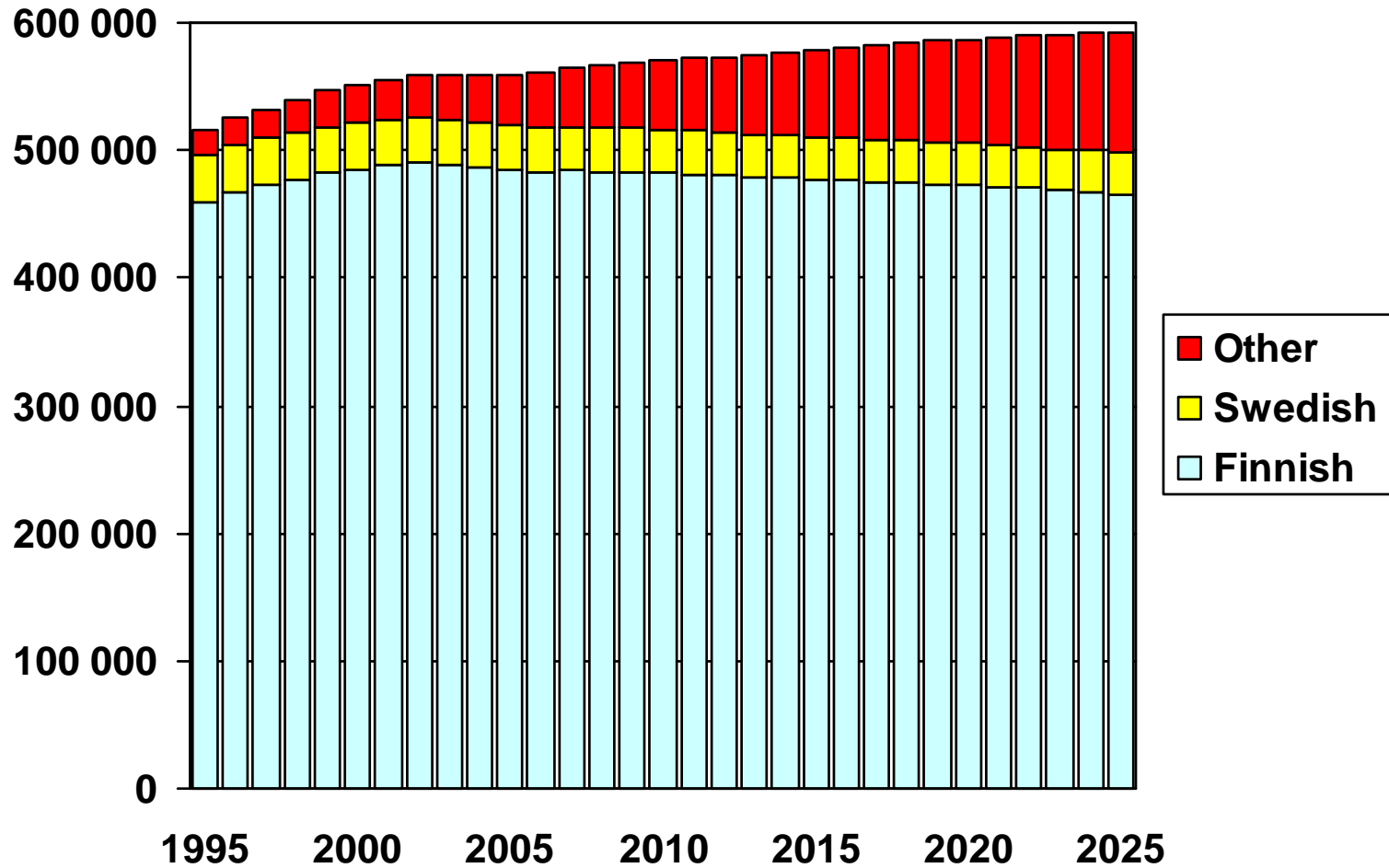
Population in Helsinki by Age, 1960-2006 and projection 2040



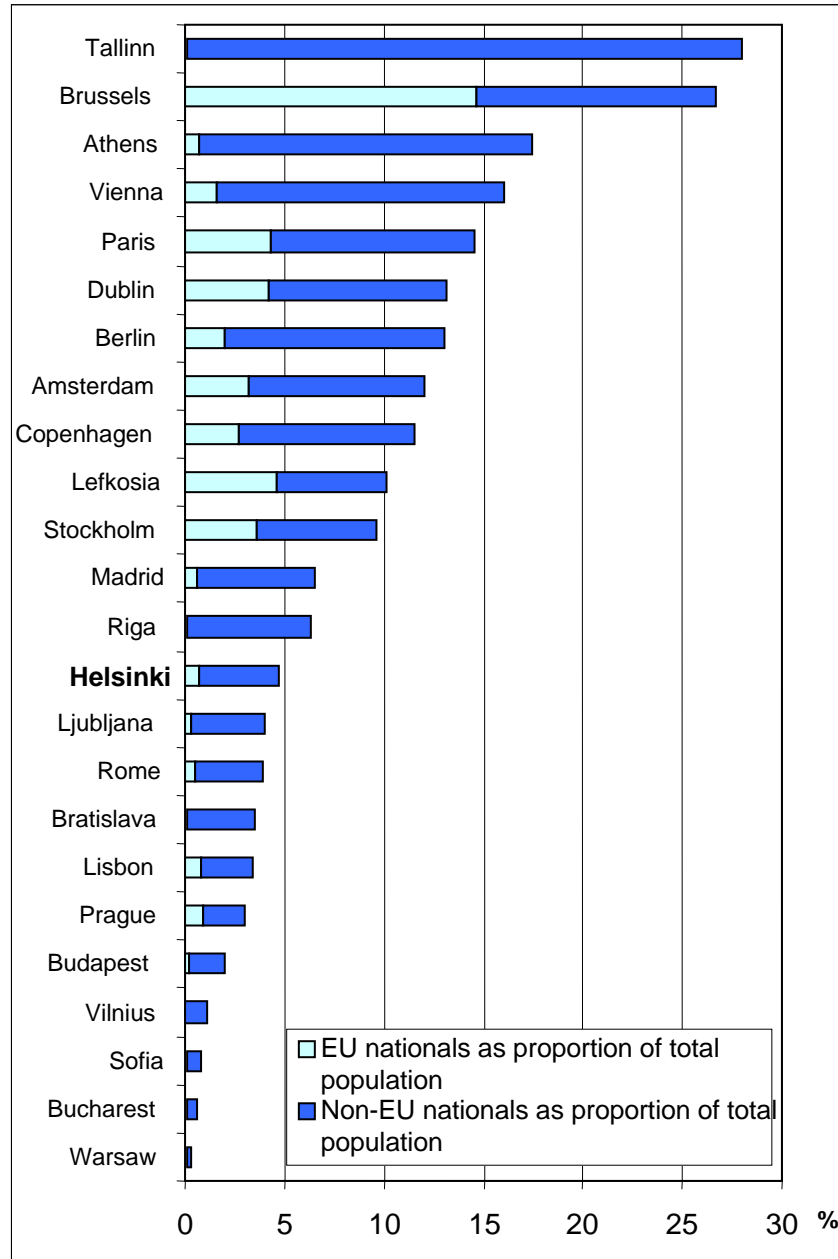
Proportion of total population aged 0-4 and 75 and over in capital cities in EU27, 2001



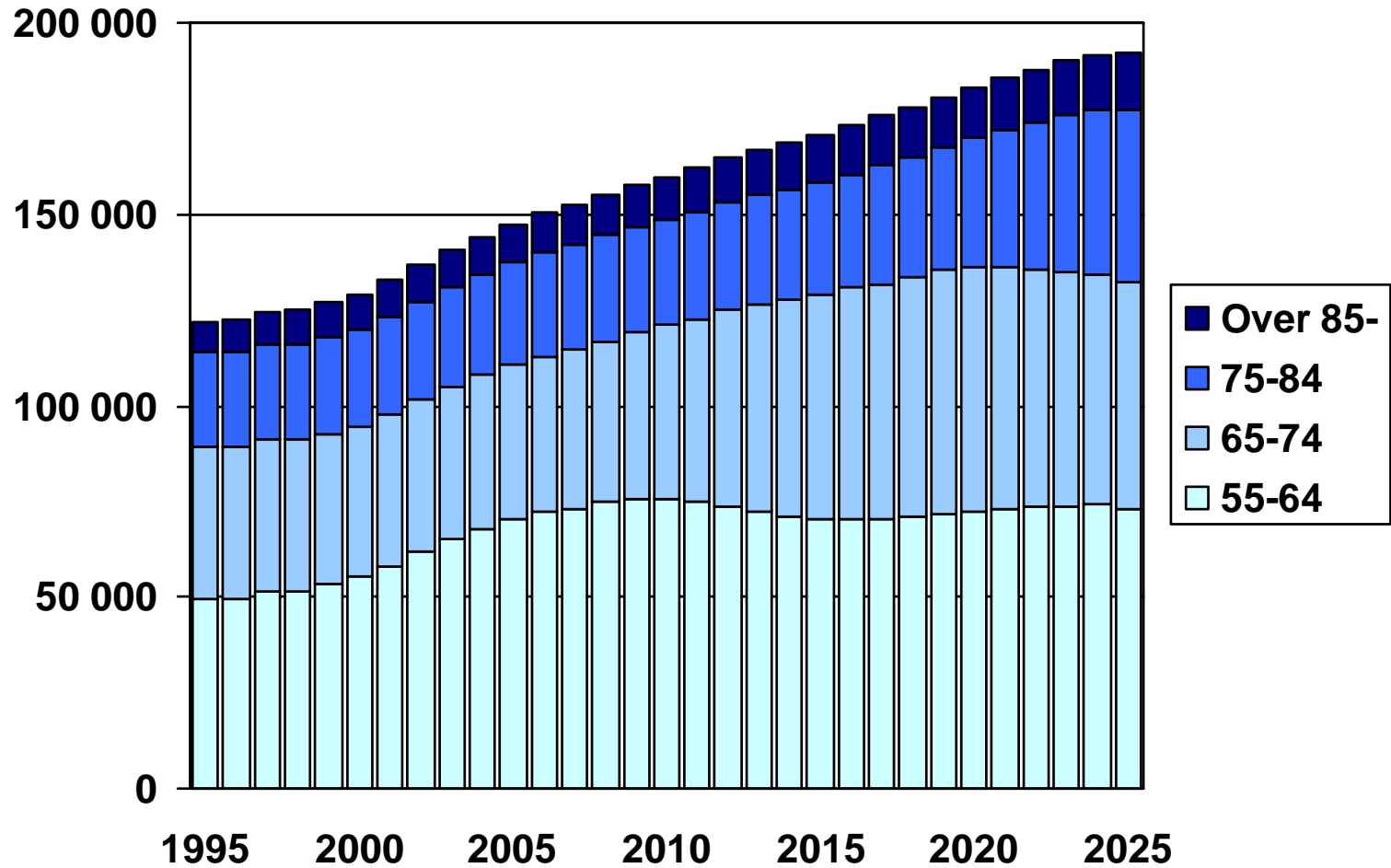
Population in Helsinki by language, 1995-2006 and projection 2025



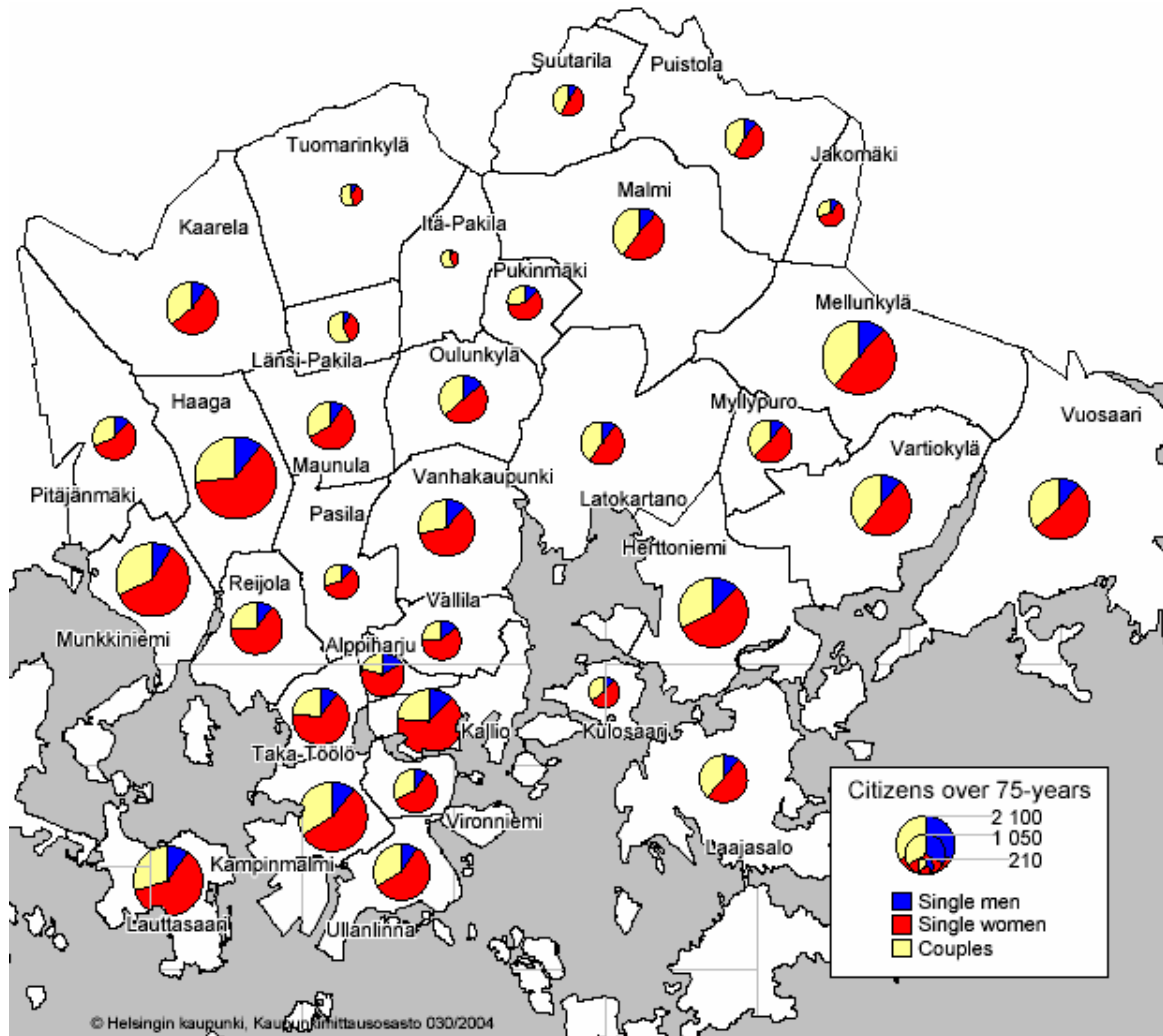
Foreign citizens as proportion of total population in capital cities in EU27, 2001



Aging population in Helsinki, 1995-2006 and projection 2025



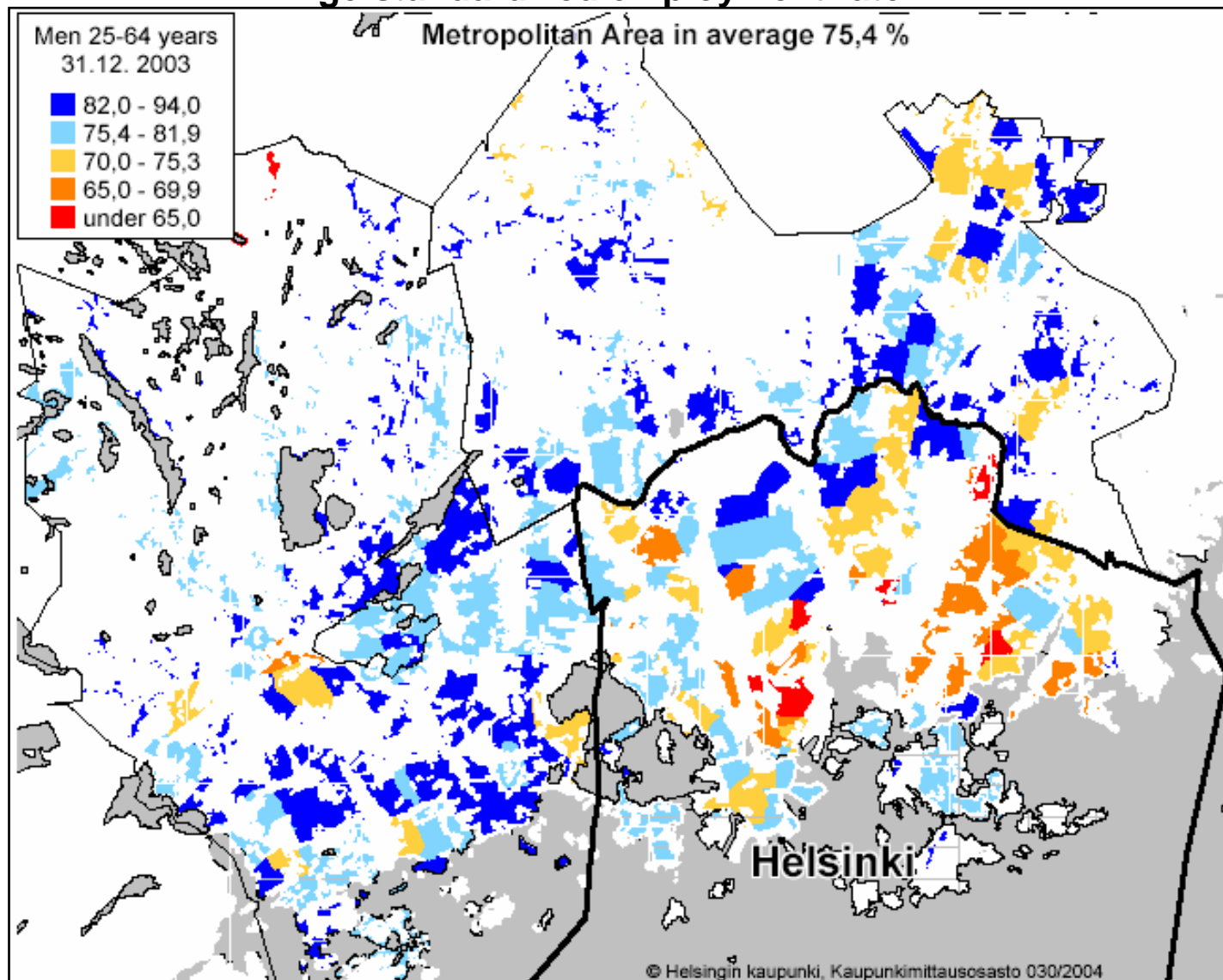
Helsinki dwellers aged 75 or older: number of people and type of household, 2006



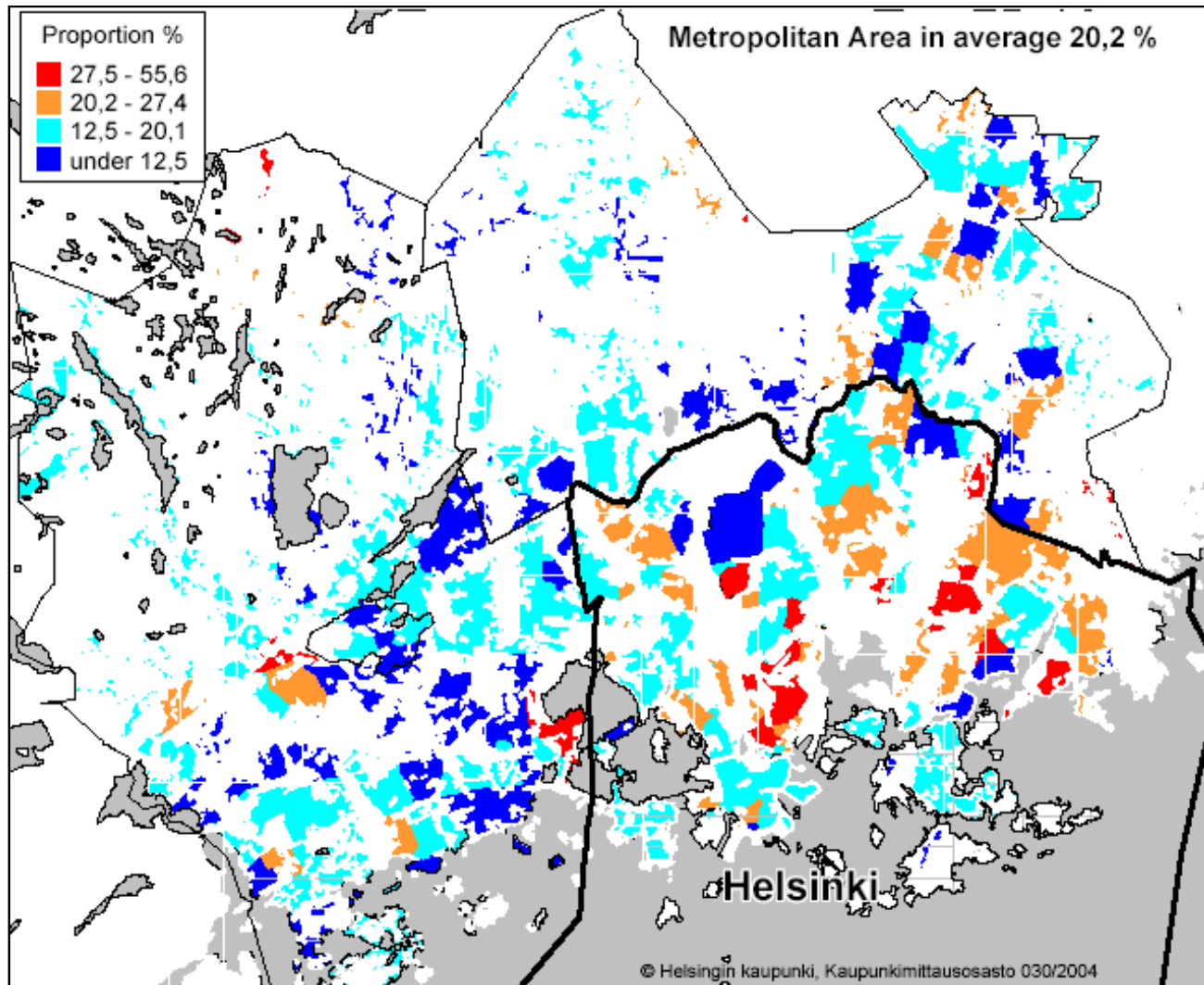


Social background information

25-64 years old men in the Helsinki Metropolitan Area: Age-standardized employment rate

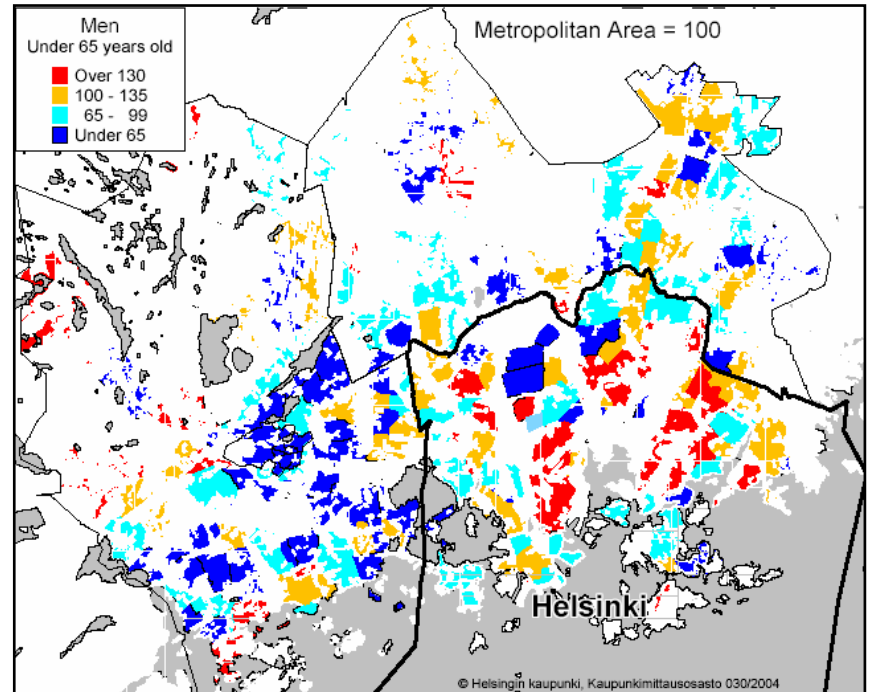
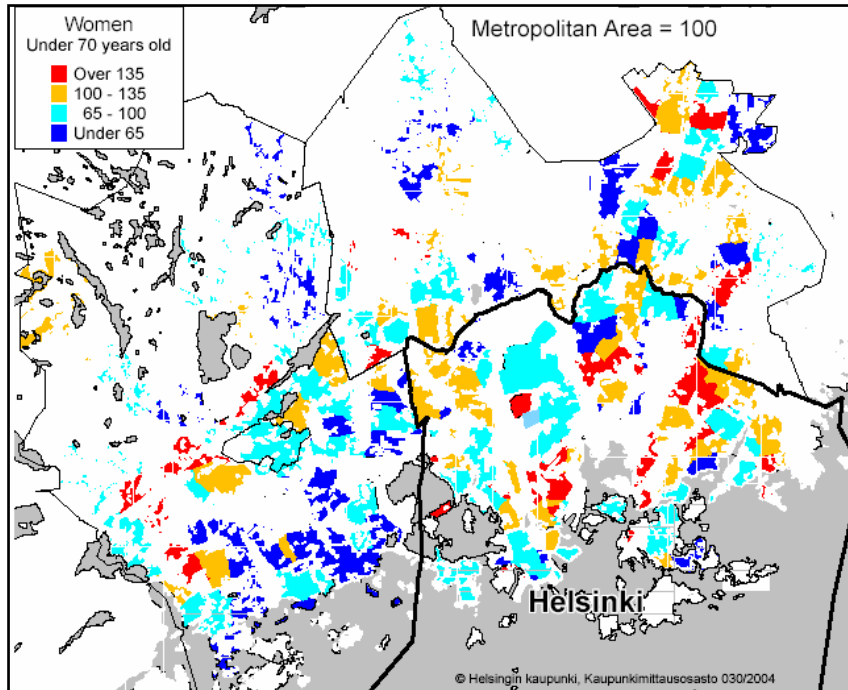


Helsinki Metropolitan Area: Men with low income 2004



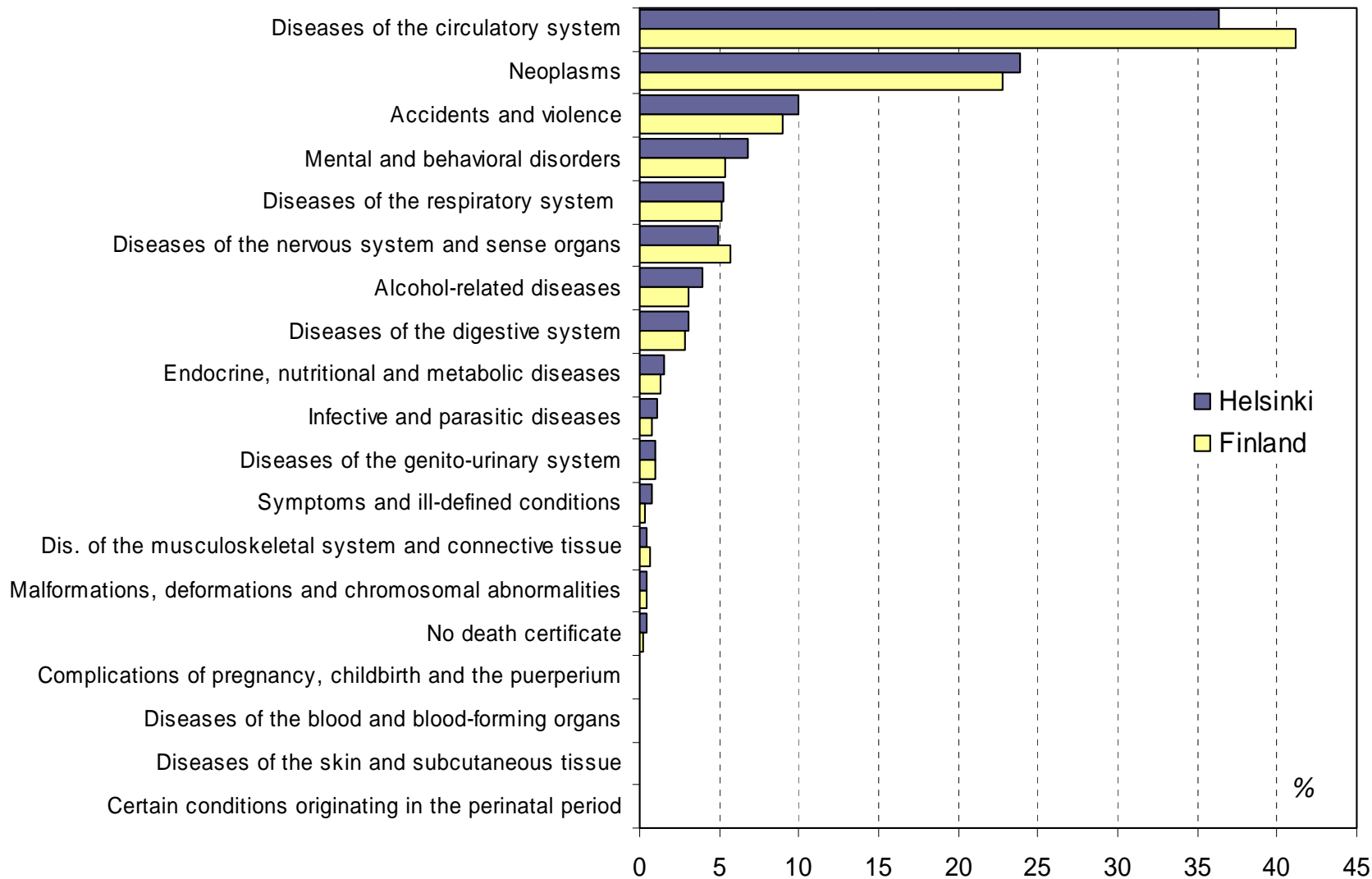
Too Early Deaths in Helsinki Metropolitan Area by District: Age-standardized mortality rates 2001-2005

Women under 70 – and Men under 65 years old. Index, Metropolitan Area=100



Age-standardized 0, 1-4, 5-9....60-64, 65-69

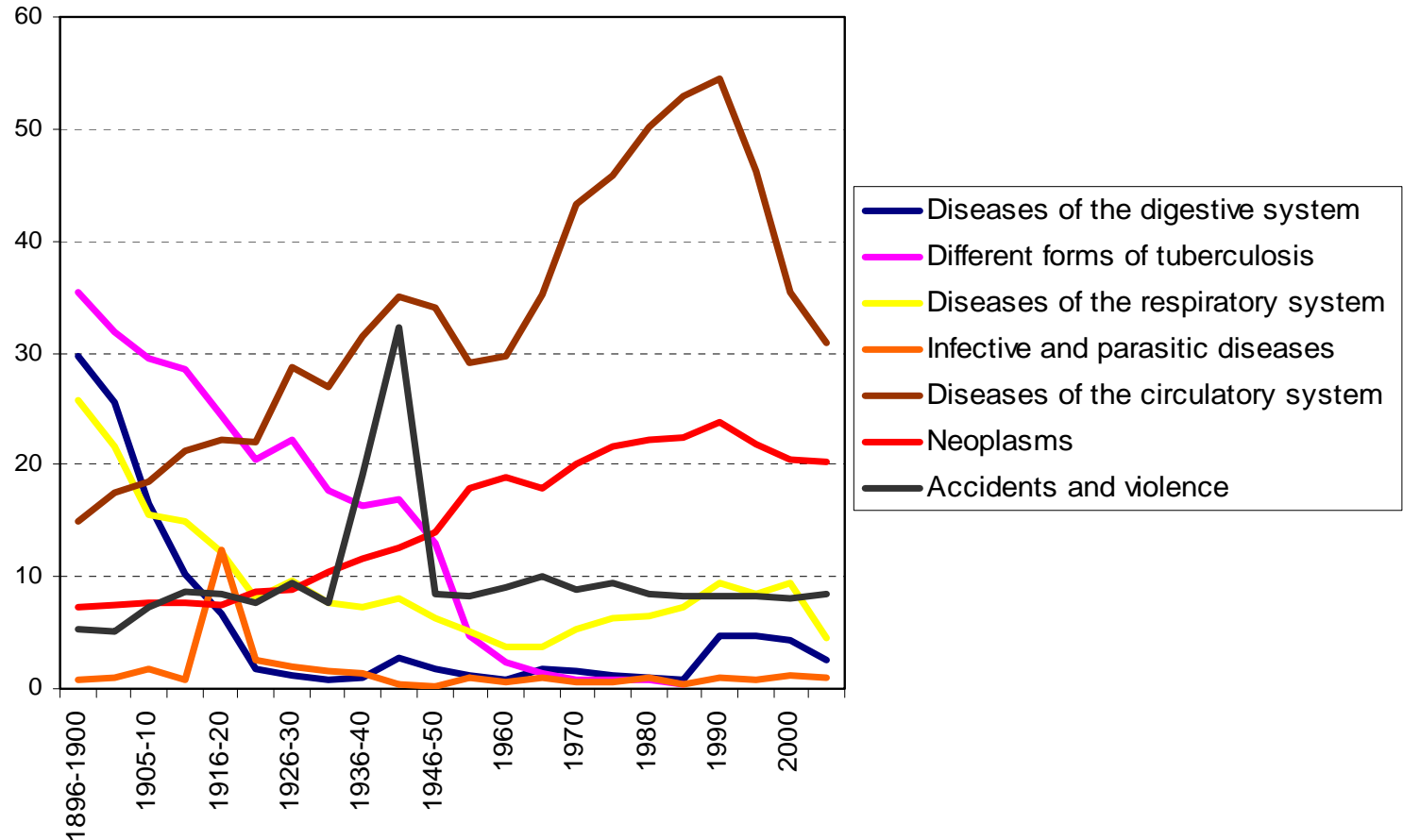
Causes of death 2005



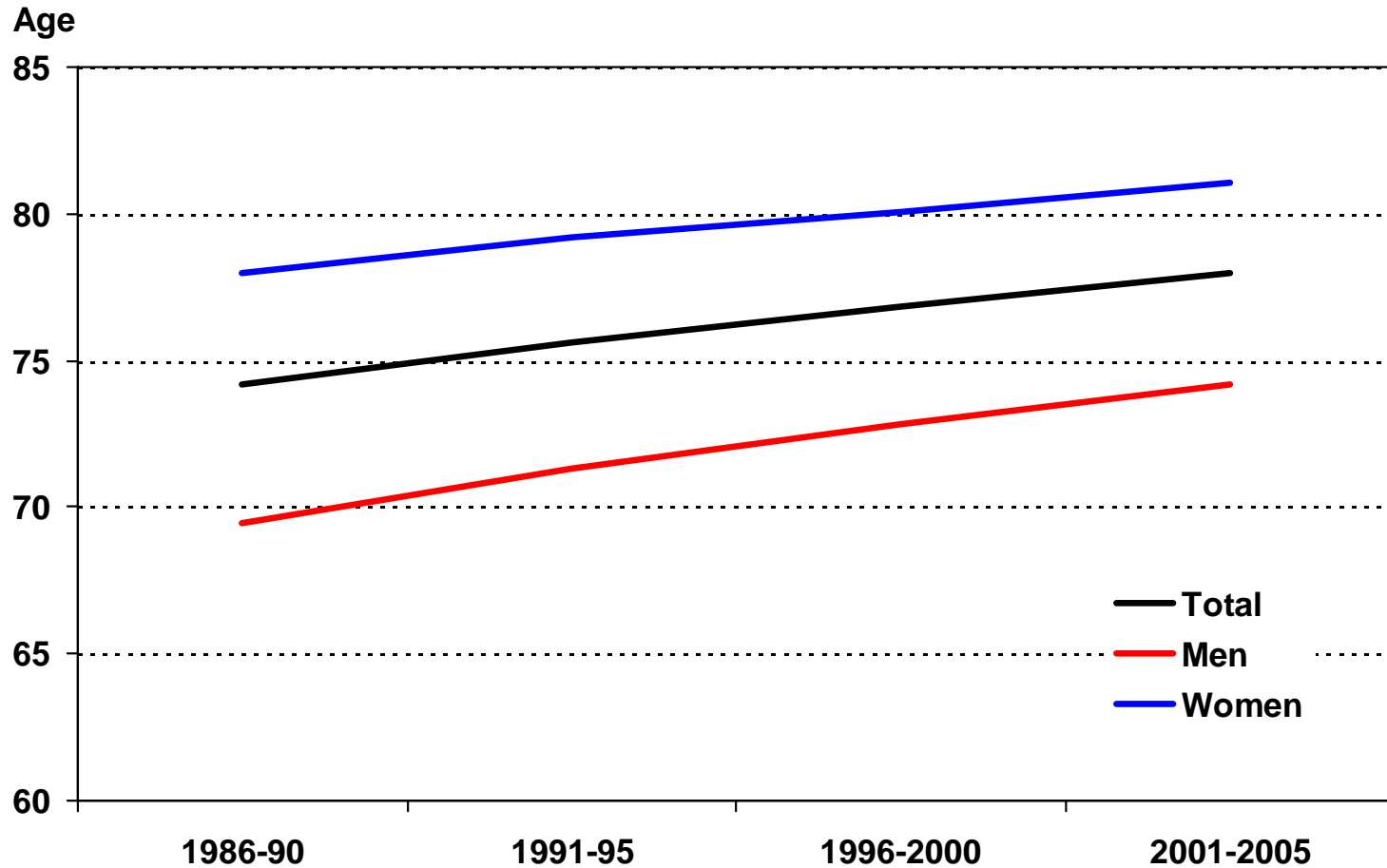
Most common causes of death in Helsinki 1896-2005

Death per 10 000 inhabitants

Death/ 10 000 inhabitants



Life expectancy at birth in Helsinki in 1986-2005 (five years mean values)





A model for positive discrimination, i.e. a toolkit for acting in anticipation

The model supporting decision makers in **acting in anticipation is based on monitoring a number of key variables, which are related to early identification of groups in need of support. The model is applied in comprehensive schools, youth activities, social affairs and health care.**

In the case of health care the focus is on the following variables, which are monitored on neighbourhood level on annual basis:

- The proportion of single parents among families with children
- The proportion of people with a low education among the 15 year olds and older
- The proportion of city tenants among the inhabitants
- The proportion of inhabitants getting social allowances
- The proportion of low-income households
- The unemployment rate
- The proportion of inhabitants with another mother tongue than Finnish or Swedish



A model for positive discrimination, i.e. a toolkit for acting in anticipation

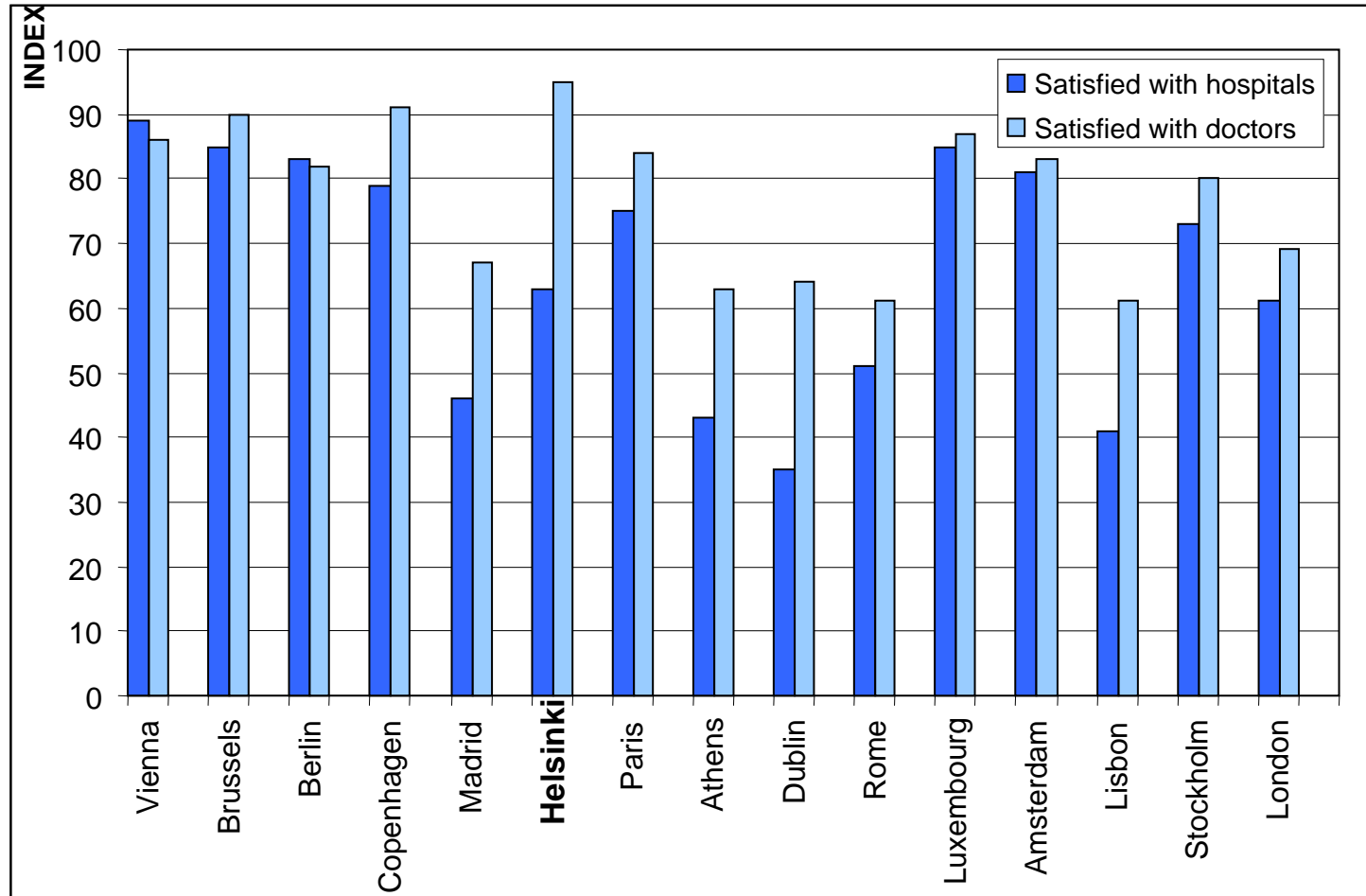
How is the model applied?

In general, if the variables for a district or neighbourhood show values indicating a need for support, extra funds are allocated to service provision in this very district or neighbourhood.

Satisfied with hospitals and satisfied with doctors

(Index ranging 0-100)

Urban Audit Perception Survey, 2004



Source: Eurostat, Urban Audit



Urban Audit Perception Survey, 2004

Description of methodology.

The survey was conducted by EOS/Gallup as a Flash/Eurobarometre survey. Principal: EU Commission, Eurostat.

In January 2004, **300 randomly selected individuals** were contacted per city. The respondents were taken from all parts of the cities. They **were asked 22 questions about the quality of life in their city.**

Four demographic questions were included to verify that a balanced sample of city residents had been obtained. The results were weighted to accurately reflect the demographic make-up of each city.

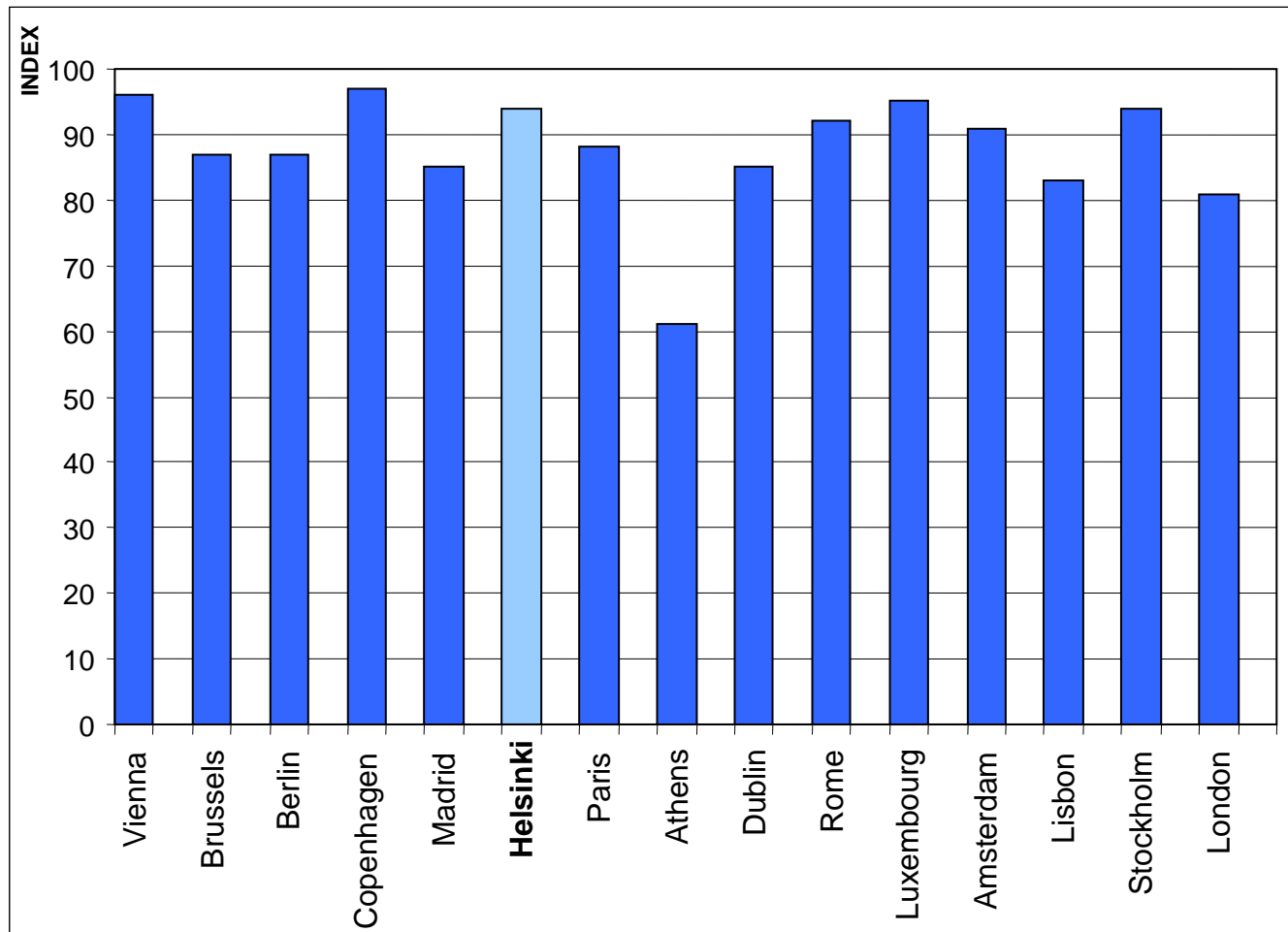
The 95% confidence interval is between 2 and 5%, depending on the distribution of the answers.

This means that a 5% or bigger difference between the results of two cities, is 95% certain to be significant. Differences of less than 2% are statistically not significant.

Satisfied to live in this city

(Index ranging 0-100)

Urban Audit Perception Survey, 2004



Medicine is art and science

