

Health inequalities indicators
in the regions of Europe:
the I2SARE project



Work package 7

I2sare – Tallin – October 2009

Subregional data availability survey

- Questions:
 - Selection of one or several subregional levels that could be used for the WP7 project
 - Data availability at these levels:
 - Health care professionals,
 - Health care structures,
 - Demographic and socio economic data,
 - Mortality data,
 - Data on morbidity,
 - Biological factors and health habits.

Subregional data availability survey

- Responses from the 8 countries / regions interviewed
 - England : Local councils
 - France Pseudo-cantons – Zones d'emploi
 - Hainaut (BE 32) : Communes + Arrondissements
 - NRW (DEA) : Kreise
 - Baden Wurttemberg (DE1) : Kreise
 - Sweden : municipalities
 - Estonia : Local County (maakond)
 - Pais Vasco (ES 21) : provinces

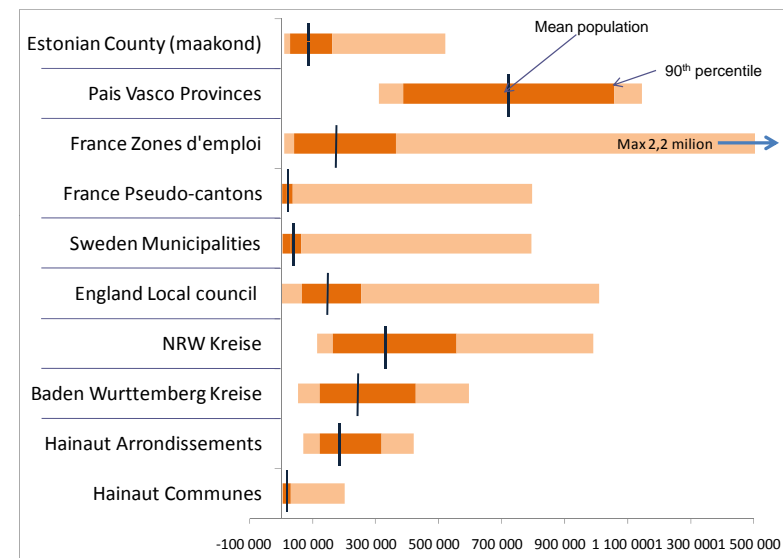
Subregional data availability survey

- Questions:
 - Main characteristics of these levels
 - total population,
 - local democracy,
 - responsibilities in the fields of social and health policies...

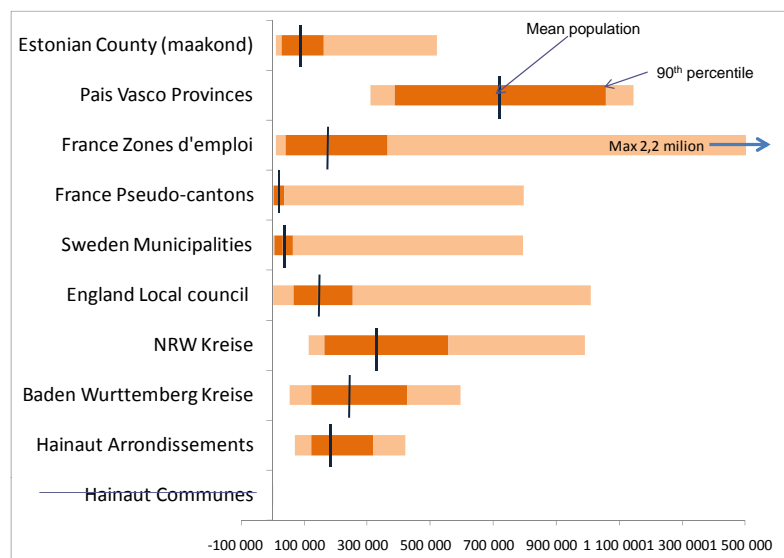
Population of the preselected levels

Country / region :	Number of subdivision	Population				
		Mean	Min	Max	Percentile 10	Percentile 90
Hainaut Communes	69	18 697	3 278	201 300	4 918	30 183
Hainaut Arrondissements	7	184 297	70 387	421 801	121 698	427 390
Baden Wurttemberg Kreise	44	244 313	54 853	597 176	121 698	427 390
NRW Kreise	54	333 555	114 437	991 883	164 639	556 187
England Local council	354	144 328	2 105	1 010 247	65 691	254 443
England Local council (boundaries as of 1 April 2009)	326	156 724	2 105	1 010 247	74 927	278 243
Sweden Municipalities	290	31 665	2 549	795 163	6 520	63 329
France Pseudo-cantons	3 168	18 472	270	797 491	3 021	37 907
France Zones d'emploi	348	176 693	9 636	2 203 817	40 364	363 842
Pais Vasco Provinces	3	719 037	309 635	1 146 421	387 919	1 057 348
Estonian County (maakond)	15	89 494	10 168	522 147	29 183	162 649

Population of the preselected levels



Population of the preselected levels



Isare European
Conference – Prague –
April 27th 2007

Characteristics of the levels

	Hainaut Arrond.	Baden Württemberg Kreise	NRW Kreise	Sweden Municip.	France ZE (Cantons)	England Local council	Pais Vasco Provinces	Estonia County (maakond)
Level of local democracy?	No	Yes	Yes	Yes	No	Yes	Yes	No
Responsibilities / ambulatory primary health care?	No	No	Some	No	No	No	No	Yes
Responsibilities / social services	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Responsibilities / health promotion	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Used for statistical analysis	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Boundaries changes in the past 10 years	No	No	No	Yes	No	Yes	No	Yes

Data availability

Using regional value
when local value missing

		Hainaut	Arondissements	Baden Württemberg	Kreise	NRW	Kreise	Sweden	Municipalities	France Cantons ZE	England	Local council	Pais Vasco	Provinces	Estonian	County (maakond)
Health care professionals	Number of physicians *															
	Number of nurses (including midwives) *															
	Number of midwives *															
Health care structures	Number of acute care hospitals beds *															
	Number of hospital beds															
	Number of Psychiatric hospital beds *															
Demographic and socio economic data	Mid-year population estimate by sex and age															
	Number of live births															
	Life expectancy at birth															
	Life expectancy at birth by sex															
	Maternal age distribution															
	Adult population by highest level of education attained															
Mortality data	Number of unemployed persons (15 to 64 years old)															
	Number of perinatal deaths															
	Number of stillbirths *															
	Age/sex breakdown of deaths all cause															
Data on morbidity	Age/sex breakdown of deaths by cause															
	AIDS incidence *															
	Number of persons injured in road traffic accidents															
	Number of persons killed in road traffic accidents															
Health habits	Birth breakdown by birthweight (grams)															
	Distribution of BMI															
	Number of regular daily smokers															

Data availability

Using regional value
when local value missing

		Hainaut	Arondissements	Baden Württemberg	Kreise	NRW	Kreise	Sweden	Municipalities	France Cantons ZE	England	Local council	Pais Vasco	Provinces	Estonian	County (maakond)
Health care professionals	Number of physicians *															
	Number of nurses (including midwives) *															
	Number of midwives *															
Health care structures	Number of acute care hospitals beds *															
	Number of hospital beds															
	Number of Psychiatric hospital beds *															
Demographic and socio economic data	Mid-year population estimate by sex and age															
	Number of live births															
	Life expectancy at birth															
	Life expectancy at birth by sex															
	Maternal age distribution															
	Adult population by highest level of education attained															
Mortality data	Number of unemployed persons (15 to 64 years old)															
	Number of perinatal deaths															
	Number of stillbirths *															
	Age/sex breakdown of deaths all cause															
Data on morbidity	Age/sex breakdown of deaths by cause															
	AIDS incidence *															
	Number of persons injured in road traffic accidents															
	Number of persons killed in road traffic accidents															
Health habits	Birth breakdown by birthweight (grams)															
	Distribution of BMI															
	Number of regular daily smokers															

Data availability

Using regional value
when local value missing
or comparison problem

		Hainaut	Arondissements	Baden Württemberg	Kreise	NRW	Kreise	Sweden	Municipalities	France Cantons ZE	England	Local council	Pais Vasco	Provinces	Estonian	County (maakond)
Health care professionals	Number of physicians *															
	Number of nurses (including midwives) *															
	Number of midwives *															
Health care structures	Number of acute care hospitals beds *															
	Number of hospital beds															
	Number of Psychiatric hospital beds *															
Demographic and socio economic data	Mid-year population estimate by sex and age															
	Number of live births															
	Life expectancy at birth															
	Life expectancy at birth by sex															
	Maternal age distribution															
	Adult population by highest level of education attained															
Mortality data	Number of unemployed persons (15 to 64 years old)															
	Number of perinatal deaths															
	Number of stillbirths *															
	Age/sex breakdown of deaths all cause															
Data on morbidity	Age/sex breakdown of deaths by cause															
	AIDS incidence *															
	Number of persons injured in road traffic accidents															
	Number of persons killed in road traffic accidents															
Health habits	Birth breakdown by birthweight (grams)															
	Distribution of BMI															
	Number of regular daily smokers															

Small number problem

- For some indicators, important yearly variation expected
- Most of the data like mortality, Number of live births, Maternal age distribution collected for 3 years
- Collection needed for 5 years in France and Sweden.

Year available Demographic and socio economic data

	Hainaut	Baden Württemberg	NRW	Sweden	France	England	PAIS VASCO	ESTONIA County (maakond)
	Arrondissements	Kreise	Kreise	Municipalities	Cantons - ZE	Local council	Provinces	
Demographic and socio economic data	Mid-year population estimate by sex and age	2004 + 2006	2007 (should have 2005 + 2006)	2005 + 2006	2005 + 2006	2005 + 2006	2005 + 2006	2005 + 2006
	Number of live births	2004 + 2005 + 2006	2007 (should have 2005 + 2006)	2004 + 2005 + 2006	2004 + 2005 + 2006	2004 + 2005 + 2006	2007 (should be 2004 + 2005 + 2006)	2004 + 2005 + 2006
	Life expectancy at birth				1982-2007* Sliding 5-or 3-year averages	2006	2005	
	Life expectancy at birth by sex		2006	2006	1982-2007* Sliding 5-or 3-year averages	2006	2005-2007	2005
Demographic and socio economic	Maternal age distribution	2006	2006	2006	2006	2006	2006	2006
	Adult population (25 to 64) breakdown by highest level of education attained			2005	2006	2006	2001	
	Number of unemployed persons		2006	2006	2006	2006	2008	2003-2005

Health care professionals

	Hainaut	Baden Württemberg	NRW	Sweden	France	England	PAIS VASCO	ESTONIA County (maakond)
	Arrondissements	Kreise	Kreise	Municipalities	Cantons - ZE	Local council	Provinces	
Number of acute care hospitals beds *	2002-2008 Les lits d'hôpitaux sont indexés selon les spécialités : ce sont surtout des lits "financiers"	2006 Only for the following sections: surgery, internal medicine, gynaecology, paediatrics	2002 - 2007 General hospitals		Until 2007	Available by PCT (Health geography) only - some Local Councils (LAS) have the same boundaries as PCTs. Available at Hospital and GP practice level : difficult to assign Hospitals and GP Practices to LA's	2007 Basque Health System (Osakidetza) and National Health Ministry, including Psychiatric acute care beds	not published by counties, but available to provide
Number of hospital beds	2002-2008		2002 - 2007 General and other hospitals		Until 2007	See above	Last year: 2007	1965-2006 by counties in public database of Statistics Estonia
Number of Psychiatric hospital beds *	2002-2008		2002 - 2007 Other hospitals		Until 2007	See above	2007 Basque Health System (Osakidetza) and National Health Ministry, Only long and middle term care beds, Acute Psychiatric beds are included above	not published by counties, but available to provide

Health care structures

	Hainaut	Baden Württemberg	NRW	Sweden	France	England	PAIS VASCO	ESTONIA County (maakond)
	Arrondissements	Kreise	Kreise	Municipalities	Cantons - ZE	Local council	Provinces	
Mid-year population estimate by sex and age	1990-2007	2007	1990 - 2007	1969-2007	Until 2006	1993 - 2007	2008 is the last year	1990-2008, as of 1st January published. Age 0 separately from 2000
Number of live births	1990-2007 Données disponibles en ligne (état civil)	2006	1990 - 2007	1968-2007 Statistics Sweden, Statistical database www.scb.se	Specific extraction Could have a cost.	1996 - 2007	2007	1970-2007
Life expectancy at birth	Has to be calculated Will have a cost		Calculation only by sex	1982-2007* Sliding 5-or 3-year averages Will have a cost.	The data is not available but could be calculated for 2006		2005	not available in public databases; in smaller counties annual fluctuations are too big for publishing annually
Life expectancy at birth by sex	Has to be calculated Will have a cost	2006	1990 - 2007	1982-2007* Sliding 5-or 3-year averages Will have a cost.	The data is not available but could be calculated for 2006	1991-1993 to 2005-2007 3yrs pooled	2005	not available in public databases; in smaller counties annual fluctuations are too big for publishing annually

Demographic and socio economic data

	Hainaut	Baden Württemberg	NRW	Sweden	France	England	PAIS VASCO	ESTONIA County (maakond)
	Arrondissements	Kreise	Kreise	Municipalities	Cantons - ZE	Local council	Provinces	
Maternal age distribution	2006 Specific extraction Not available for German community	2006 no data for age group under 18	2002 - 2007	1973-2006	1980-2006 Specific extraction Could have a cost.	Available by different age groups: under 20, 20-24, 25-29, 30-34, 35-39, 40-44, 45+. Specific request possible.	2006	1969-2007: Under 18 category is not available in public databases, 5-year groups are available by counties currently
Adult population (25 to 64) breakdown by highest level of education attained			2005 Have to be constructed from several questions, German education classifications differ considerably from ISCED classes.	1985-2007	2006 may be available in September - December 2009		2001. We should ask to EUSTAT (regional statistical agency) for a specific extraction.	Years ? As based on annual LFS survey, only NUTS3 level available. By counties only for Population Census years
Number of unemployed persons		2008 not sure whether data are according to the definition of ILO	2002 - 2007 Definition not congruent with ILO def.	1996-2008 The Swedish Public Employment Service 16 to 64 years old. www.ams.se	The data is not available for these ages but for the 18-64 years old people, Specific extractions should be asked	1999 - 2008 Data updated quarterly. Currently (Jan 09) data is available for July 2007-June 2008. Ages 16-59/64 (different ages of retirement for males and females). Rounded to the nearest 100. 1999-2003 not as complete as later, due to unreliability of data.	Population included: 16 years and older 2008	Unemployment rate is published by counties as 3 year average (2005-2007, 2004-2006, 2003-2005)

Mortality data

	Hainaut	Baden Württemberg	NRW	Sweden	France	England	PAIS VASCO	ESTONIA
	Arrondissements	Kreise	Kreise	Municipalities	Cantons - ZE	Local council	Provinces	County (maakond)
Number of perinatal deaths	1987-1999 + 2004 Specific extraction		2002 - 2007	1973-2006	1981-2006	1996 - 2007	2006	very small numbers by counties and not published!
Number of stillbirths *	1987-1999 + 2004 Specific extraction		2002 - 2007 children with more than 500 g of weight are counted as stillbirth	1973-2006	1981-2006	2006 - 2007	2006	from 22 weeks, very small numbers by counties! Available by counties based on Estonian Medical Birth Registry data for 1998-2007 in www.tai.ee
Age/sex breakdown of deaths all cause	1987-1999 + 2004 Specific extraction	2007	1998 - 2007	1961-2006 Sliding 5-or 3-year average (mean value). Necessary to process.	1981-2006	1996-2007	2006	1989-2007
Age/sex breakdown of deaths by cause	1987-1999 + 2004 Specific extraction	1998-2002 Il s'agit des données que nous avons achetées pour la comparaison transfrontalière.	1998 - 2007	1961-2006 Sliding 5-or 3-year average (mean value). Necessary to process.	1981-2006	1996-2007	2006	not in public databases published, only standardised death rates by causes of death for 2002-2003, 2004-2005, 2006-2007

Morbidity and health habits

	Hainaut	Baden Württemberg	NRW	Sweden	France	England	PAIS VASCO	ESTONIA
	Arrondissements	Kreise	Kreise	Municipalities	Cantons - ZE	Local council	Provinces	County (maakond)
AIDS incidence *							2007	1999-2007 B20-B24
Number of persons injured in road traffic accidents	2006 Specific extraction	2006 data concern people injured in the area	2000 - 2007	1998-2007 Sliding 5-or 3-year average (mean value).		2004 - 2007 Available for some units only	2007	2003-2007 by the place of accident, published by the Estonian Road Administration, currently available in website (www.mnt.ee) only 2007, 2008 by paper publication of Statistics Estonia for 2003-2007
Number of persons killed in road traffic accidents	2006 Specific extraction	2006 data concern people killed in the area	2000 - 2007	1997-2006 Sliding 5-or 3-year average (mean value).		2004 - 2007 Available for some units only	2007	See above
Birth breakdown by birth weight (grams)	2006 Specific extraction Not available for German community	2006 but only for birth weights under 1500 g, 1500-2499 g and 2500 g and over	2002 - 2007 < 1500, 1500 - 2499, >=2500	1973-2006	2006 (has to be verified Specific extraction)	1996 - 2007	2006	(1992-2007) Not in public databases by counties, on basis of EMBR 1992-2007
Distribution of BMI in the (adult 16 years or more) population			2005			Obese adults only. Modelled based estimates from 2003-05 Health Survey for England data	We should ask to Health Department for a specific extraction . 2007	Survey data . EU SILC in Estonia includes also this, but not published
Number of regular daily smokers aged 15 years or more			2005			Adults who smoke' (Smoking is defined as self-reported current cigarette smoking). Modelled data based estimates from 2003-05 Health Survey for England data.	2007	Survey data

Unavailable data

	Hainaut	Baden Württemberg	NRW	Sweden	France	England	PAIS VASCO	ESTONIA
	Arrondissements	Kreise	Kreise	Municipalities	Cantons ZE	Local council	Provinces	County (maakond)
Health care professionals	Number of physicians *							
	Number of nurses (including midwives) *							
	Number of midwives *							
Health care structures	Number of acute care hospitals beds *							
	Number of hospital beds							
	Number of Psychiatric hospital beds *							
Demographic and socio economic data	Mid-year population estimate by sex and age							
	Number of live births							
	Life expectancy at birth							
	Life expectancy at birth by sex							
	Maternal age distribution							
	Adult population by highest level of education attained							
Mortality data	Number of unemployed persons (15 to 64 years old)							
	Number of perinatal deaths							
	Number of stillbirths *							
	Age/sex breakdown of deaths all cause							
	Age/sex breakdown of deaths by cause							
Data on morbidity	AIDS incidence *							
	Number of persons injured in road traffic accidents							
	Number of persons killed in road traffic accidents							
	Birth breakdown by birthweight (grams)							
Health habits	Distribution of BMI							
	Number of regular daily smokers							