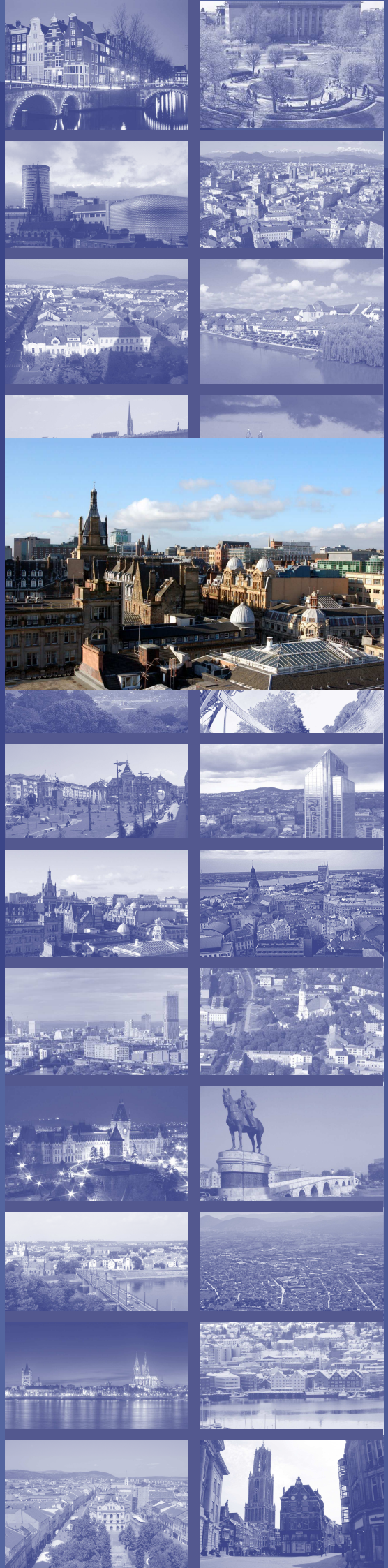


Health Profile:

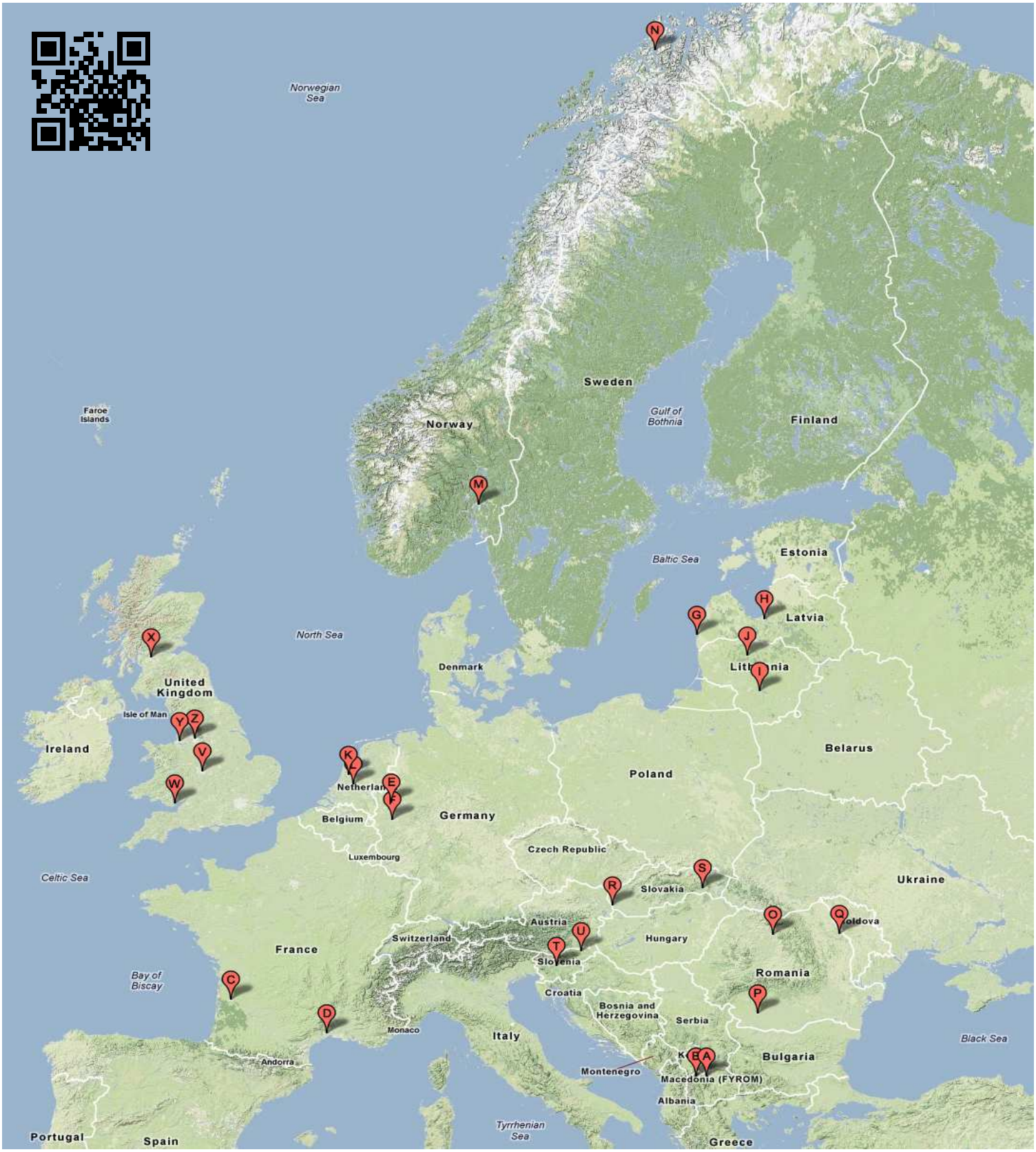
Glasgow, United Kingdom

Taking cities to a healthier future

EURO-URHIS 2

European Urban Health Indicators System Part 2

Urban Health Monitoring and Analysis System to Inform Policy



A	Skopje, the former Yugoslav Republic of Macedonia	N	Tromsø , Norway
B	Tetovo, the former Yugoslav Republic of Macedonia	O	Bistrița, Romania
C	Bordeaux, France	P	Craiova, Romania
D	Montpellier, France	Q	Iași, Romania
E	Oberhausen, Germany	R	Bratislava, Slovakia
F	Köln, Germany	S	Košice, Slovakia
G	Liepāja, Latvia	T	Ljubljana, Slovenia
H	Riga, Latvia	U	Maribor, Slovenia
I	Kaunas, Lithuania	V	Birmingham, United Kingdom
J	Šiauliai, Lithuania	W	Cardiff, United Kingdom
K	Amsterdam, The Netherlands	X	Glasgow, United Kingdom
L	Utrecht, The Netherlands	Y	Merseyside, United Kingdom
M	Oslo, Norway	Z	Greater Manchester, United Kingdom

All-cause mortality in both males and females is higher in Glasgow compared to other EURO-URHIS 2 cities. Mortality from malignant neoplasms and from diseases of the respiratory system is substantially higher than the overall EURO-URHIS 2 mean. Mortality from diseases of the circulatory system does not differ.

Heavy episodic drinking and smoking in Glasgow youth occur as often as in other EURO-URHIS 2 cities.

This health profile describes the health situation and associated health determinants in Glasgow compared with those observed in other European urban areas.

Glasgow is one of the urban areas chosen for EURO-URHIS 2 (European Urban Health Indicator System Part 2), a project that aims to identify health problems in urban areas. The EURO-URHIS 2 project describes health and health determinants specific to urban areas in Europe, covering cities in North, East, South, and West Europe. This project may add to information that is already locally available, in that it is the first study to enable reliable comparisons of health status between different cities in Europe. Policy makers can use the information to prioritise topics for urban health policy and for interventions in an evidence-based way.

EURO-URHIS 2 gathered information by collecting data from routinely available registration data, and by conducting youth and adult surveys at the end of 2010. In total, data from 26 urban areas in Europe were available for between-city comparisons and benchmarking.

The routinely available registration data relate to the most recently available year (2006-2008). The youth survey was a school-based survey of 14-16 year olds. In Glasgow, 296 students completed a valid questionnaire. Because of a very low response rate in the adult survey in Glasgow, these results are not included in the health profile.

More detailed information on the justification of methods and instruments that were used, as well as response rates, selection of cities and indicators, and statistical methodology, can be found on our websites: www.urhis.eu and http://results.urhis.eu. The websites also provide data from other participating urban areas and comparisons between specific cities can be made.

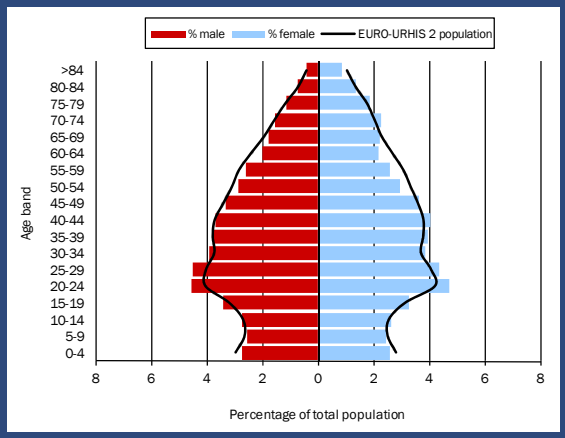
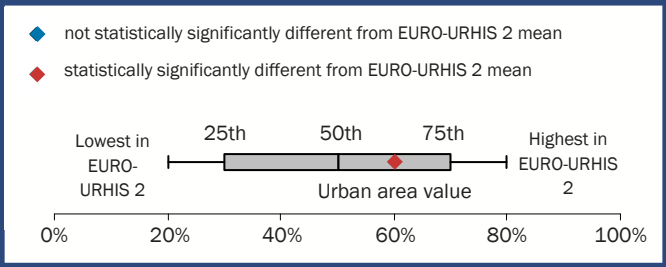


Figure 1. Age distribution

Differences in health status may possibly be explained by age. Figure 1 shows the age distribution in Glasgow compared to the other EURO-URHIS 2 urban areas.



The graphs in this health profile show the health status of the urban area compared to other EURO-URHIS 2 urban areas. The whiskers represent the lowest and highest value within the EURO-URHIS 2 project on a scale of 0 to 100%. The grey bar represents the 25th, 50th, and 75th percentile. The urban area value is shown as a diamond, which is blue when the value is not statistically significantly different from the EURO-URHIS 2 mean and red when the difference is statistically significant (at the 5% level).

Health-related Characteristics of Glasgow

	Indicator	Glasgow	United Kingdom	EURO-URHIS 2 range (percentiles)					EURO-URHIS 2 mean	N
				min	25th	50th	75th	max		
Demographic	1. Population size (x1,000)	578	61,192	67	264	406	708	2,565	570	23
	2. Population density	3,329	251	27	1,115	2,040	2,840	4,580	1,974	24
	3. Population aged 0-19 years	22%	24%	17%	20%	22%	24%	28%	22%	23
	4. Population aged 65+ years	14%	16%	7%	11%	14%	15%	20%	14%	23
	5. Live births	53	63	39	45	52	58	75	53	24
	6. Teenage pregnancies	-	26	4	7	11	20	33	14	18
	7. Pregnancies after age 35	-	34	7	18	23	33	59	28	18
Socio-economic	8. Unemployment (age 19-64)	-	-	3.6%	4.0%	4.9%	7.2%	10.2%	5.8%	16
	9. Higher level education	-	-	25%	33%	45%	53%	72%	45%	16
	10. Not enough money	-	-	5%	11%	16%	22%	61%	21%	16
	11. Low family wealth	14%	-	5%	7%	13%	21%	44%	16%	20
Health System	12. MMR vaccinated	95%	86%	83%	88%	94%	97%	100%	93%	19
	13. DTP vaccinated	98%	92%	83%	93%	95%	97%	99%	94%	19
	14. Cervical smear test	-	-	41%	62%	70%	76%	83%	68%	16
	15. Cholesterol measurement	-	-	23%	42%	47%	52%	64%	47%	16
Health Status	16. Life expectancy - male	70.7	77.8	68.2	71.0	75.3	76.1	77.0	73.6	18
	17. Life expectancy - female	77.2	81.9	76.2	78.5	80.2	81.0	82.0	79.7	18
	18. Infant mortality	5.6	4.6	1.3	3.5	4.9	5.7	9.4	5.0	24
	19. Low birth weight	8.2%	7.1%	2.7%	5.2%	6.6%	8.1%	11.8%	6.7%	22

Table 1. Health-related characteristics of Glasgow

Source. Indicators 1-7, 12-13, and 16-19: routinely available registration data; indicators 8-10 and 14-15: adult survey; indicator 11: youth survey. Missing data are indicated by "-".
N = number of urban areas that were able to collect data on the specific indicator.

1. number of inhabitants; **2.** number of inhabitants per km^2; **3.** % of inhabitants aged 0-19 years; **4.** % of inhabitants aged 65 years or older; **5.** number of births per 1,000 women aged 15-44 years; **6.** number of births per 1,000 women aged 15-19 years; **7.** number of births per 1,000 women aged 35-44 years; **8.** % of adults aged 19-64 years who are unemployed; **9.** % of adults who attained higher level education; **10.** % of adults who do not have enough money for daily expenses; **11.** % of youth who live in a low wealth family, as defined by a FAS (Family Affluence Scale) score of ≤3; **12.** % of population who have completed measles, mumps, and rubella (MMR) vaccination courses before school-age; **13.** % of population who have completed diphtheria, tetanus, and poliomyelitis (DTP) vaccination courses before school-age; **14.** % of adult women who have undergone a cervical smear test within the past three years; **15.** % of adults who had their serum cholesterol measured within the last year; **16-17.** number of years that a newborn is expected to live if current mortality rates continue to apply; **18.** annual number of deaths of children under one year of age, per 1,000 births; **19.** % of total live births weighing less than 2,500 grams

Compared to other cities in EURO-URHIS 2, Glasgow is an urban area with high population density and an average aged population.

The percentage of youth that reported to live in poor families (14%) is similar to the EURO-URHIS 2 mean.

The proportion of people who have completed DTP vaccination courses before school-age is relatively high compared to the other EURO-URHIS 2 cities.

Life expectancy at birth is an indicator for the general health status of a population. In Glasgow, male life expectancy is 70.7 years and female life expectancy is 77.2 years. Both male and female life expectancy are lower than the overall average in EURO-URHIS 2.

Infant mortality is an indicator for population health and quality of health care services. With an infant mortality rate of 5.6 per 1,000 live births, Glasgow is comparable to other EURO-URHIS 2 urban areas.

At the population level, low birth weight is an indicator for pregnancy conditions and perinatal care. Low birth weight can at the individual level also result in health problems later in life. Of all newborns in Glasgow, 8.2% had a low birth weight, which is higher than the overall EURO-URHIS 2 mean.

YOUTH HEALTH STATUS

	Indicator	Glasgow	EURO-URHIS 2 range (percentiles) 0% 50% 100%	EURO-URHIS 2 mean	N
Health Status	1. Good self-perceived health	86%		92%	20
	2. Elevated risk of psychological problems	21%		20%	20
	3. Psychosomatic symptoms	9%		10%	20
	4. Low back pain	33%		42%	20
Lifestyle Factors	5. Overweight and obesity	-		13%	15
	6. Physical activity ≥2 hours/week	48%		50%	20
	7. Regular fruit consumption	35%		49%	20
	8. Regular vegetable/salad consumption	44%		52%	20
	9. Regular tooth brushing	74%		72%	20
	10. Frequently watching television	64%		60%	20
	11. Daily smoking	9%		12%	20
	12. First smoking ≤13 years	20%		24%	20
	13. Heavy episodic drinking	29%		33%	20
	14. First alcohol ≤13 years	44%		53%	19
	15. Ever used cannabis	24%		16%	20
	16. Unprotected sexual intercourse	6%		4%	20
Environ-ment	17. Crime in area	55%		35%	20
	18. Involved in traffic accident	5%		7%	18
	19. Being bullied	3%		7%	20

Table 2. Health status and determinants in youth (14-16 years)

Source. Indicators 1-19: youth survey. Missing data are indicated by "-".
N = number of urban areas that were able to collect data on the specific indicator.

1. % of youth who perceive their health as good, very good, or excellent; **2**. % of youth with an overall Strengths and Difficulties Questionnaire (SDQ) score of 20 or higher; **3.** % of youth who reported a lot of headaches, stomach aches, or sickness during the past six months; **4.** % of youth who experienced low back pain during the past month; **5.** % of youth overweight or obese according to the international BMI cut-offs; **6.** % of youth who participate in vigorous physical activity for more than two hours per week in their free time; **7.** % of youth who eat fruit on most days of the week; **8.** % of youth who eat vegetables and/or salads on most days of the week; **9.** % of youth who brush their teeth more than once a day; **10.** % of youth who watch television for more than two hours on weekdays; **11.** % of youth who smoke tobacco every day; **12.** % of youth who reported first smoking at ≤13 years; **13.** % of youth who drank five or more units of alcohol on one occasion during the past 30 days; **14.** % of youth who reported first drinking alcohol at ≤13 years; **15.** % of youth who ever used cannabis; **16.** % of the total youth population who did not use a condom the last time they had sexual intercourse; **17.** % of youth who reported presence of crime, violence, or vandalism in the area where they live; **18.** % of youth who had a road traffic accident resulting in injury over the past 12 months; **19.** % of youth who have been bullied at least twice in the past couple of months

Health Status and Determinants in Youth

Table 2 gives an overview of the health status and determinants in Glasgow youth, as reported from the survey. Self-perceived health is a measure of adolescent well-being. 86% of youth in Glasgow perceived their health to be (very) good or excellent, which is significantly lower than the overall EURO-URHIS 2 proportion. In Glasgow, a comparable proportion of youth were identified with an elevated risk of psychological problems (21%), compared to the overall EURO-URHIS 2 proportion. Low back pain was reported less often.

Childhood obesity is related to a higher risk of obesity, disability, and premature death later in life. Physical activity can contribute to maintaining a healthy weight and preventing the occurrence of chronic conditions. Furthermore, physical activity is associated with psychological benefits and with a better school performance in young people. The proportion of youth who reported participation in vigorous physical activity for two or more hours per week is similar in Glasgow (48%), compared to the overall EURO-URHIS 2 proportion. A healthy diet can lower the risk of obesity. Regular consumption of fruit and vegetables occurs less frequently in Glasgow than in other EURO-URHIS 2 urban areas.

Initiation of smoking and drinking alcohol at a young age is a strong predictor of smoking during adulthood and of later problems with alcohol.

The proportion of youth in Glasgow who smoke daily (9%) is similar to the overall EURO-URHIS 2 proportion. Drinking alcohol at the age of 13 or younger occurs significantly less often in Glasgow than in other EURO-URHIS 2 cities. Heavy episodic drinking of five or more units of alcohol on one occasion was reported as often in Glasgow (29%) compared to the total EURO-URHIS 2 population.

Regular cannabis use in young people can lead to impaired cognitive development. 24% of youth in Glasgow have ever used cannabis, which is higher than the overall EURO-URHIS 2 proportion.

Neighbourhood crime, violence, or vandalism was significantly more often reported by youth in Glasgow (55%) compared to other cities. The proportion of youth who were victims of bullying in the past couple of months was significantly lower compared to the other urban areas in EURO-URHIS 2.

ADULT HEALTH STATUS

	Indicator	Glasgow	United Kingdom	EURO-URHIS 2 range (percentiles)					EURO-URHIS 2 mean	N
				min	25th	50th	75th	max		
Morbidity	1. HIV/AIDS incidence - male	6	16*	2	6	8	23	71	16	19
	2. HIV/AIDS incidence - female	2	9*	0	2	6	12	16	7	19
	3. Tuberculosis incidence	16	14	5	11	17	39	153	33	22
	4. Lung cancer incidence	-	66	29	42	55	62	103	54	13
Mortality	5. All-cause mortality - male	1,199	729	654	752	834	1,014	1,426	919	19
	6. All-cause mortality - female	821	510	362	495	542	640	821	560	19
	7. Malignant neoplasms - male	336	216	195	230	245	258	336	250	22
	8. Malignant neoplasms - female	232	154	114	143	153	162	232	154	22
	9. Diseases of the circulatory system - male	365	247	154	227	298	456	676	353	22
	10. Diseases of the circulatory system - female	244	156	91	147	199	299	406	220	22
	11. Diseases of the respiratory system - male	158	89	32	55	62	80	158	72	22
	12. Diseases of the respiratory system - female	120	64	12	21	36	50	120	43	22
	13. Transport accidents	4	6	1	3	5	11	16	7	21
	14. Suicide and intentional harm	14	7	4	8	11	15	29	12	22

Table 3. Morbidity and mortality

Source. Indicators 1-14: routinely available registration data. Missing data are indicated by "-".
* Country level data include HIV incidence only.
N = number of urban areas that were able to collect data on the specific indicator.

1-4. Number of newly diagnosed cases with a specific disease per 100,000 persons per year; **5-6.** All-cause mortality rate per 100,000 persons per year (standardised on European population); **7-14.** Mortality rate due to a specific cause per 100,000 persons per year (standardised on European population)

The health status of a population can be assessed by using a number of parameters, such as those referring to acute and chronic disease, mortality, psychological well-being, and self-perceived health. Table 3 shows the overall health status among adults in Glasgow, compared to other cities in Europe. The results show that in Glasgow the incidence of tuberculosis is similar to the overall average in all EURO-URHIS 2 urban areas.

Both in males and females, all-cause mortality is higher than in other cities. Also mortality from malignant neoplasms and from diseases of the respiratory system are substantially higher.

Beneficiaries

The University of Manchester; Municipal Health Service Utrecht; University of Liverpool; The Iuliu Hatieganu University of Medicine & Pharmacy Epidemiology Department; The Norwegian Institute of Public Health; Municipal Health Service Amsterdam; Kaunas University of Medicine; Regional Public Health and Health Promotion Centre (Slovenia); Institute of Health and Work, North Rhine-Westphalia; Slovak Public Health Association; Hacettepe University, Department of Public Health; North West Regional Health Brussels Office; Latvian Public Health Agency; South East European University; National Federation of Regional Health Observatories; Pham Ngoc Thach University of Medicine

Local EURO-URHIS 2 representative in Glasgow:

Dr Arpana Verma
Manchester Academic Health Sciences Centre
University of Manchester

arpana.verma@manchester.ac.uk
+44 (0)161 275 5206

EURO-URHIS 2
European Urban Health Indicators System Part 2
Urban Health Monitoring and Analysis System to Inform Policy

SEVENTH FRAMEWORK PROGRAMME

The research leading to these results has received funding from the European Union's Seventh Framework Programme (FP7/2007 -2013) under grant agreement no 223711

Municipal Health Service Utrecht, The Netherlands

Design by Nicola Dale