#### Glasgow - Past & Present

Big trends

James Arnott

From indicators to insights

Anne Scoular

Integrated public health profile

David Walsh & Bruce Whyte





#### Themes of presentations

- What is improving?
- What's proving resistant to change?
- What's getting worse?

Future trends and implications

## Big trends





#### 1971 CENSUS

"Shipbuilding, heavy engineering, textile and chemical manufacturing predominated until recently ... light engineering and electrical products now form one of the city's most important industrial features ..."



#### FURTHERMORE ...

"... large numbers of workers engaged in the distributive trades, the transport and communications industry, the manufacturing of food (including bread), drink and tobacco and of clothing and footwear ..."



#### NOT TO FORGET ...

"... a considerable number of people in the city are engaged in professional and scientific services ..."



# PERIOD OF CHANGE

- Decline of manufacturing ...
- ... but improved quality of employment for those in work
- Loss of population ...
- ... but increased size of 25-44 age group
- The city used to follow ...
- ... now the city leads the conurbation



#### **25-44 AGE GROUP**

	1981 25-44	2001 25-44	% change
Glasgow	23%	31%	35%
Rest of Area	26%	28%	8%
Scotland	26%	29%	12%



#### SOCIAL CLASS I&II

	I&II 1981	I&II 2001	% Change
Glasgow	18%	38%	+111%
Rest of Area	28%	37%	+32%
Scotland	28%	37%	+32%



#### **OWNER-OCC**

	O-O 1981	O-O 2001	% Change
Glasgow	24%	49%	+104%
Rest of Area	33%	65%	+97%
Scotland	35%	63%	+80%



#### INTERPRETATION

- Rapid change since 1980s involving a major period of adjustment
- Closing the gap with some but not all national rates
- Why?

### From indicators to insights



## from indicators to insight





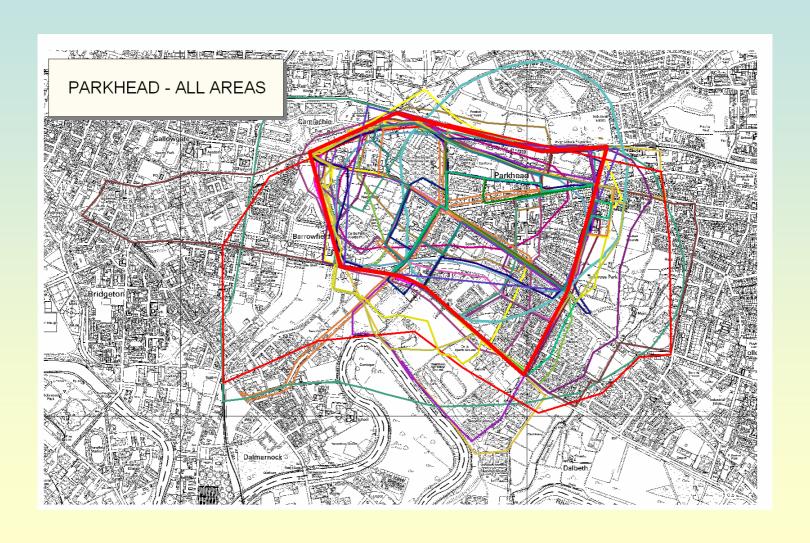
#### local context

- Parkhead: Glasgow in microcosm
  - 4 mines in central Parkhead
  - Forge 1837-1976
  - Decline in heavy industry
- Regeneration efforts
  - 1957: 'Comprehensive Development Area'
  - 1976: GEAR ('Glasgow Eastern Area Renewal' Project)
  - 1980s onwards:
    - Areas of Priority Treatment
    - Priority Partnership Areas
    - Social Inclusion Partnerships





#### definition of 'Parkhead'







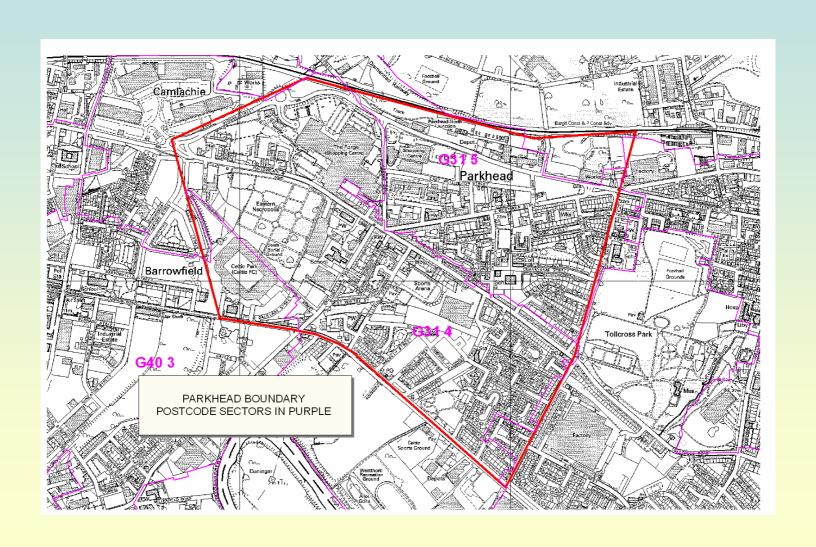


#### local context



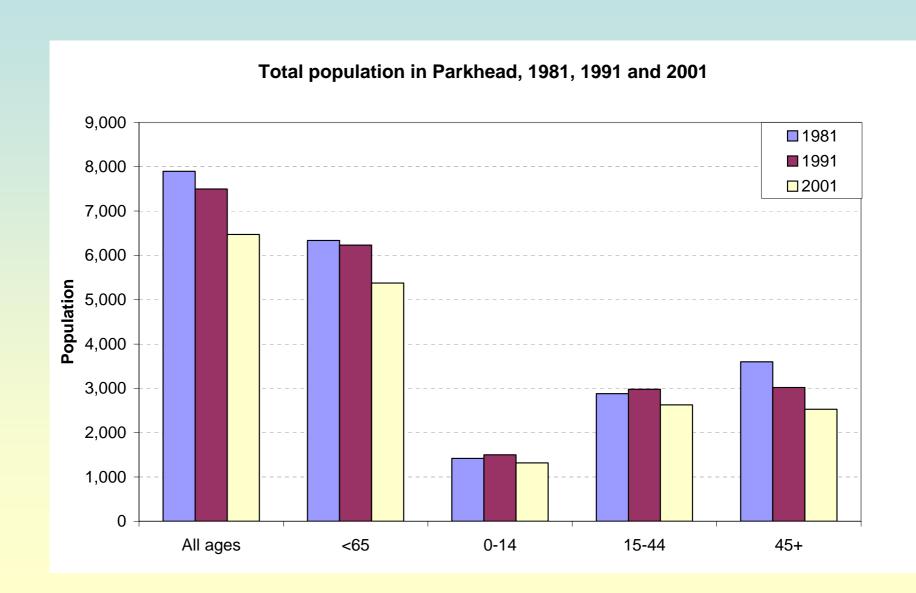


#### relationship to PC sectors





#### population estimates

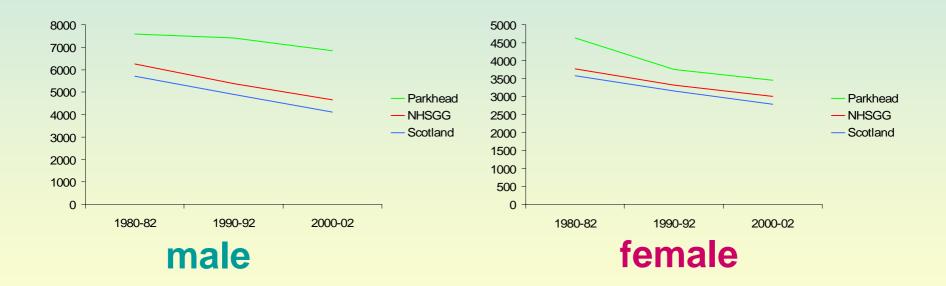




#### health outcomes



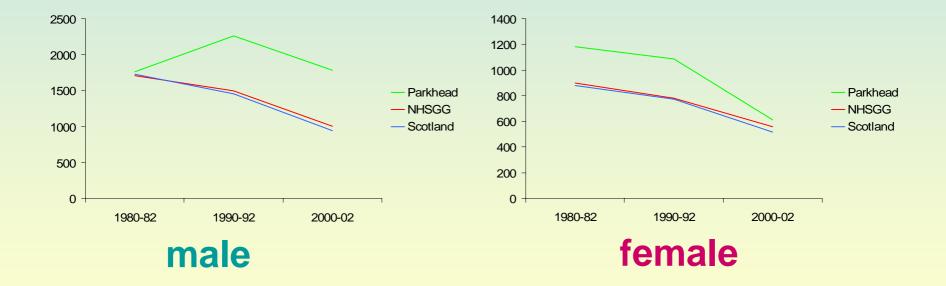
#### all cause mortality\*



<sup>\*</sup>rate/100,000 person-years at risk (standardised to 2001 NHSGG population)



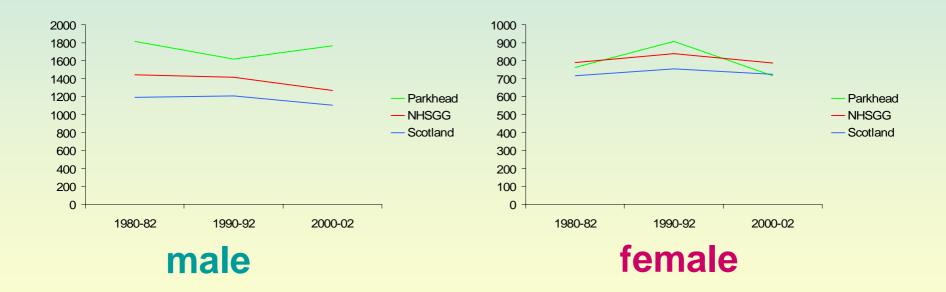
#### ischaemic heart disease mortality\*



<sup>\*</sup>rate/100,000 person-years at risk (standardised to 2001 NHSGG population)



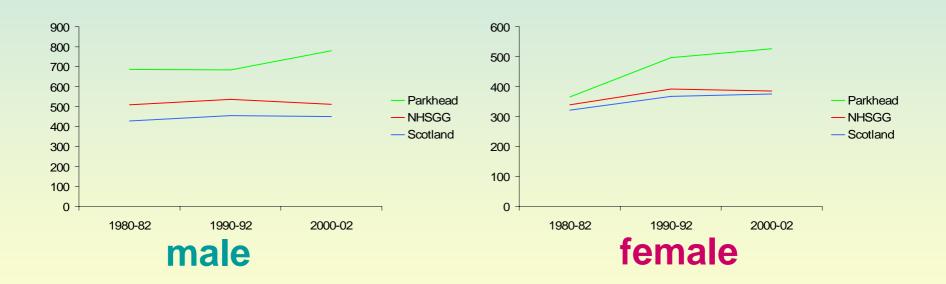
#### all cancer mortality\*



<sup>\*</sup>rate/100,000 person-years at risk (standardised to 2001 NHSGG population)



#### all cancer incidence\*



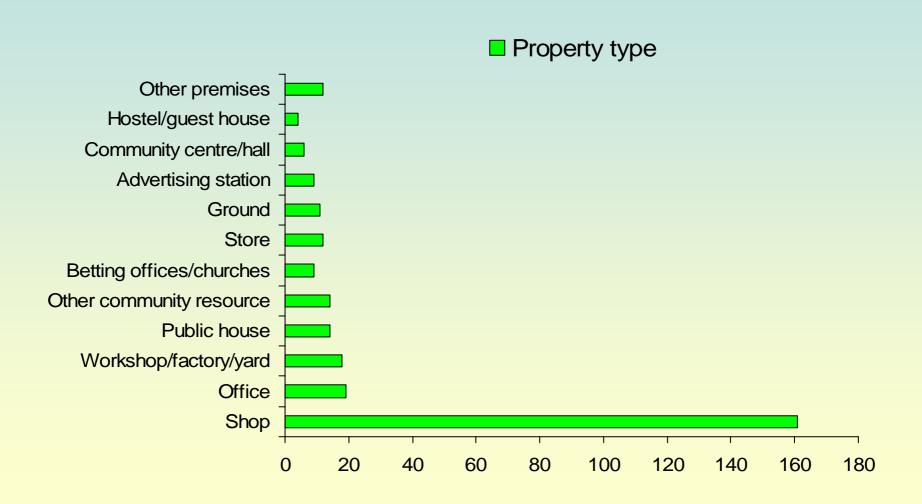
<sup>\*</sup>rate/100,000 person-years at risk (standardised to European standard population)



#### health determinants: environment



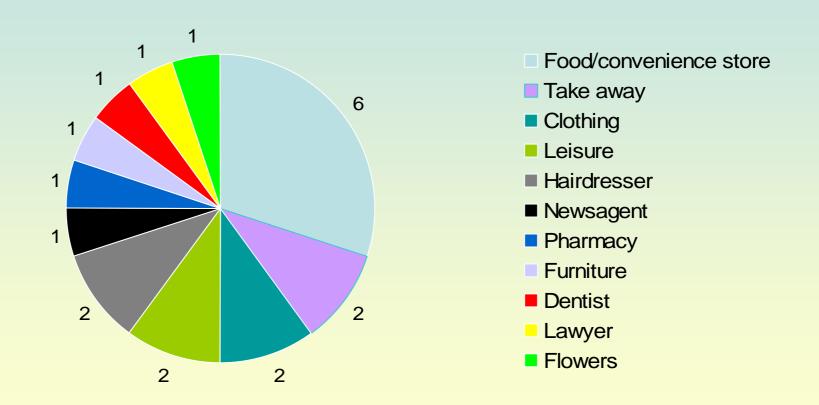
# commercial properties within community defined area



Source: Glasgow City Council Financial Services, January 2005



#### Parkhead Cross Retail Profile



Source: Parkhead Cross Economic Regeneration Project Final Report, 2002



#### retail environment





#### retail environment

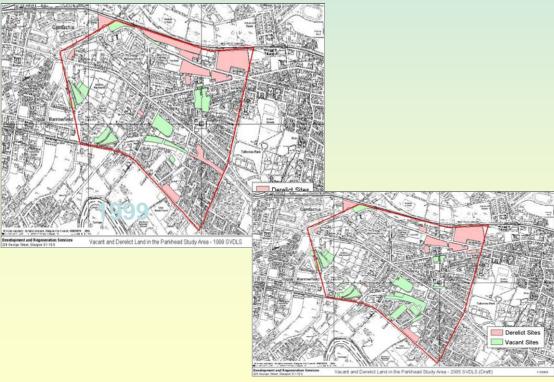




#### trends in vacant & derelict land

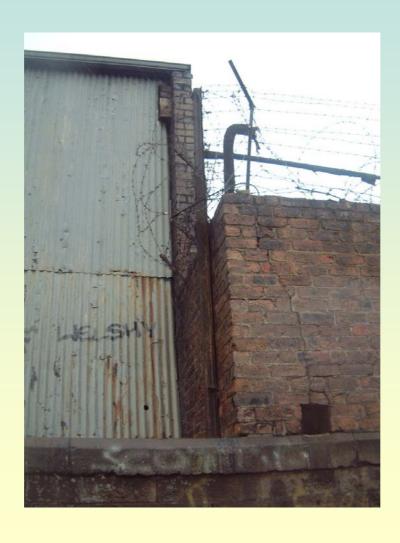


1994





#### from this....





#### to this...





#### or this?





# conclusions



- routine data applicable to socially defined 'place'
- determinant data
  - surveys
  - COA level
- detailed health outcome data clearly show Parkhead's health trajectory
- understanding pathways & interactions
- understanding lived experiences
- information for action



#### acknowledgements

Karen Lorenzetti NHSGG
 Tricia Richardson NHSGG
 Khalid Bashir NHSGG
 Sarah McCullough NHSGG
 Janice Scouller NHSGG

Lorraine Tulloch

Alan Grosvenor

Diane McGregor

Suzie Kemsell

Glasgow City Council

Glasgow City Council

 David Walsh Health Scotland Bruce Whyte Health Scotland

Ian Henton Health Protection Scotland

 Parkhead Housing Association Parkhead Youth Project Parkhead Health Centre East End Partnership



# Integrated public health profile





# Areas of analysis

- Historical context
- Population dynamics
- Economy
- Social environment
- Physical environment

- Behaviour
- Pregnancy & childbirth
- Children's health
- Health & function
- Illness & disease



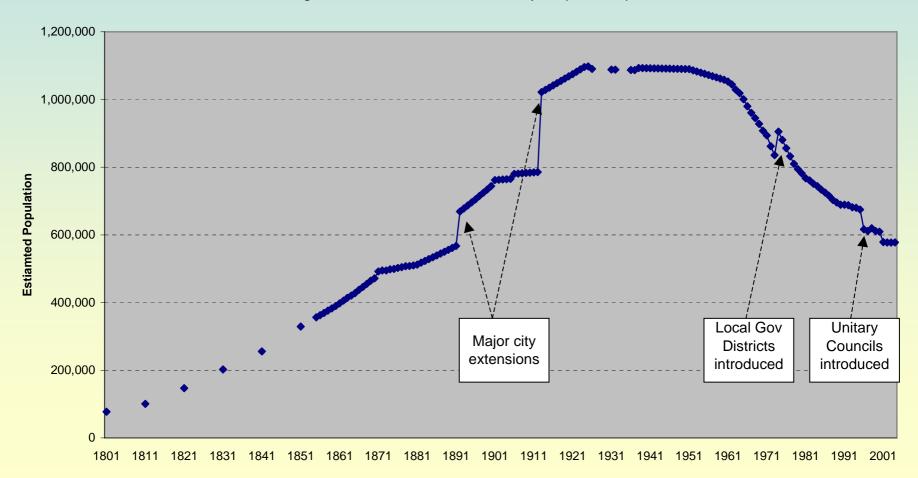
# Historical context/ Population dynamics



# Population

#### Glasgow's Population; 1801-2004

Source: Reports of Medical Officer of Health (1898, 1925,1926,1972); Registrar General of Scotland's Annual Reports (1973-2004)

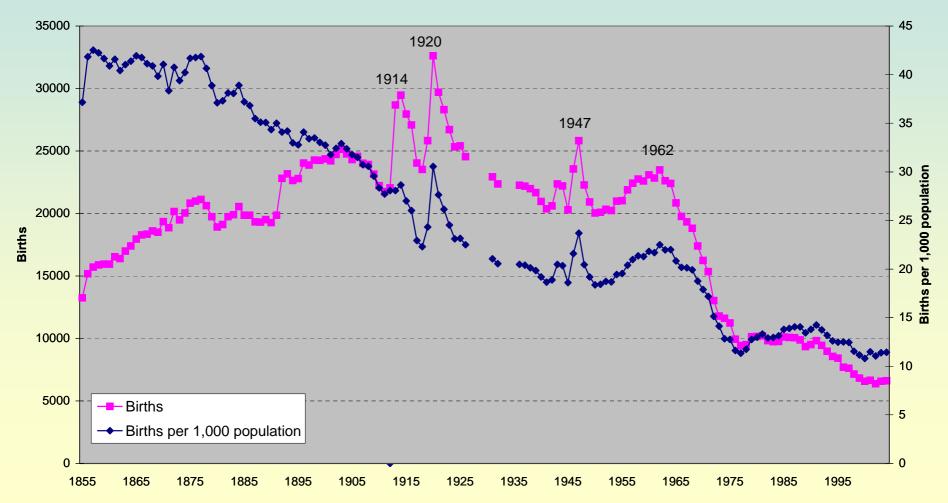




## **Births**

#### Trends in Births and Births per 1,000 population in Glasgow; 1855 - 2004

Source: Reports of Medical Officer of Health (1898, 1925,1926,1972) Registrar General of Scotland's Annual Reports (1973-2004)

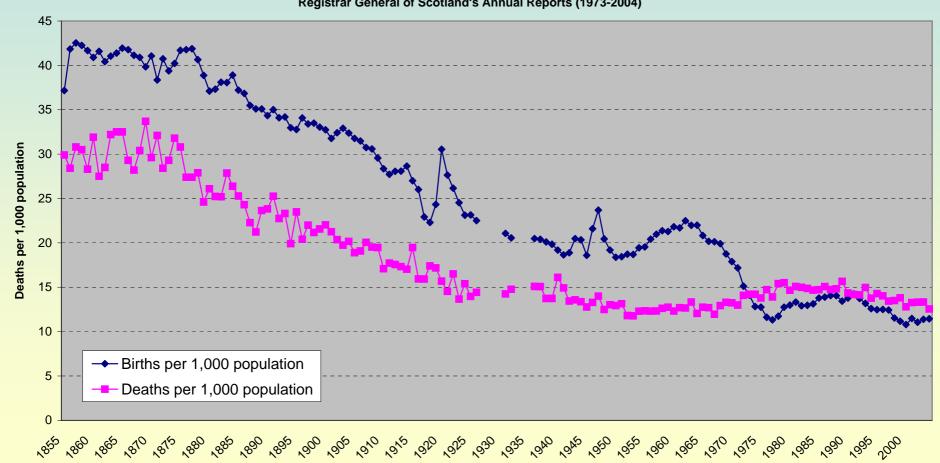




#### Births & Deaths

#### Deaths and Births per 1,000 population in Glasgow; 1855 - 2004

Source: Reports of Medical Officer of Health (1898, 1925,1926,1972); Registrar General of Scotland's Annual Reports (1973-2004)

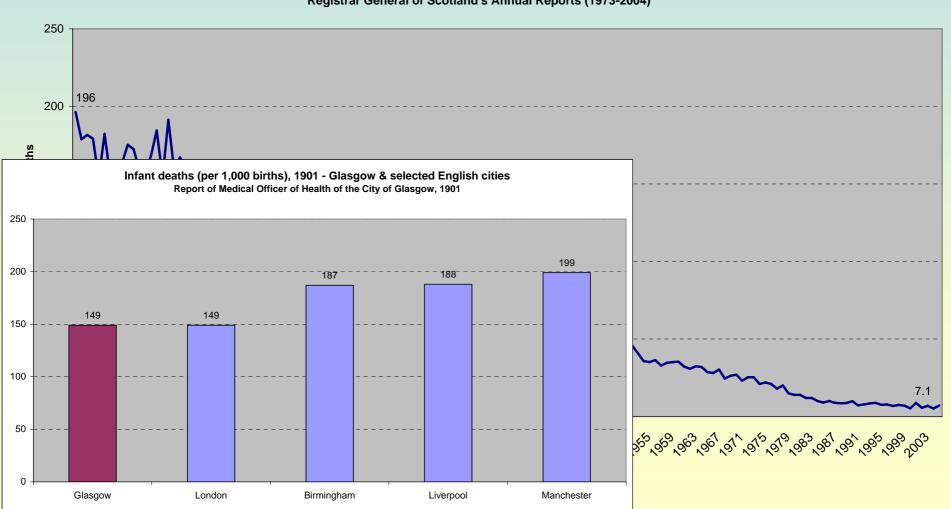




## Infant deaths

Infant Deaths (under 1 year) per 1,000 births in Glasgow; 1855 - 2004

Source: Reports of Medical Officer of Health (1898, 1925,1926,1972); Registrar General of Scotland's Annual Reports (1973-2004)

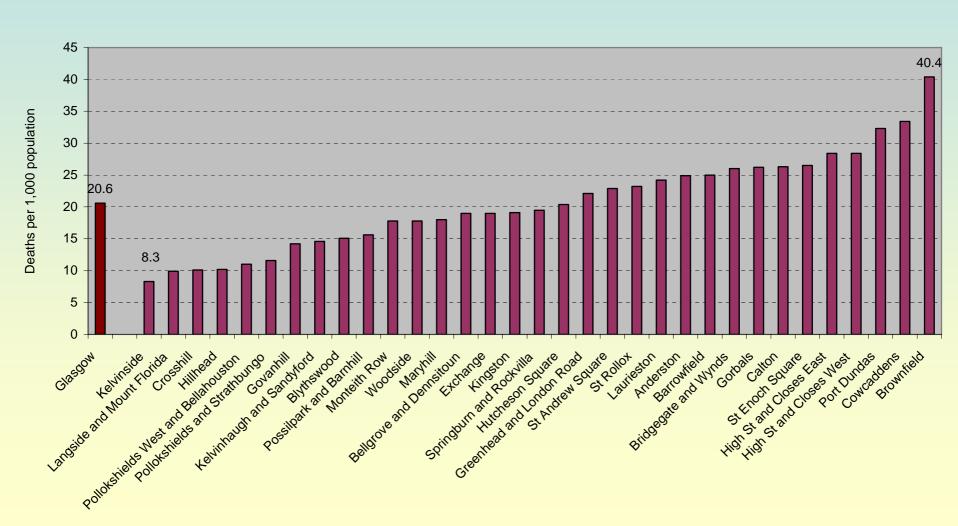




# Inequalities - 1901

#### Death rates in Glasgow's Sanitary Districts; 1901

Source: Report of the Medical Officer of Health of the City of Glasgow 1901

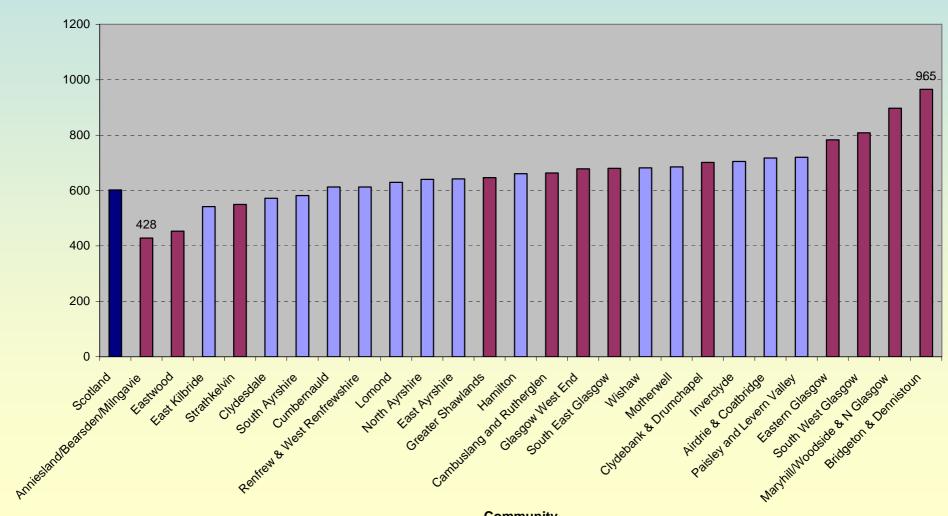




# Inequalities - 2001

Death rates per 100,000 population, directly age standardised; 2000-2002; West of Scotland and Glasgow communities

Source: NHS HS - Community Health Profiles, 2004 (from GROS data)

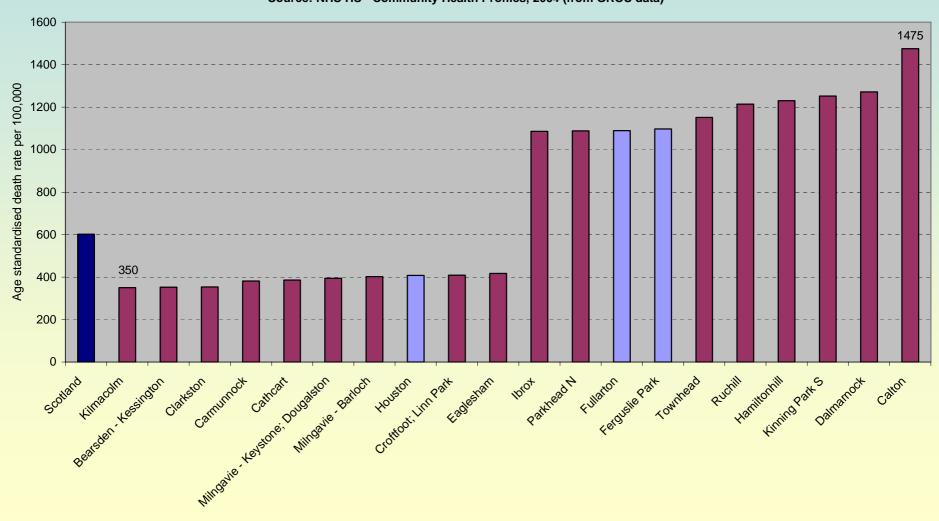




# Inequalities - 2001

Death rates per 100,000 population, directly age standardised; 2000-2002 Glasgow & West of Scotland small areas with 10 highest and 10 lowest rates

Source: NHS HS - Community Health Profiles, 2004 (from GROS data)

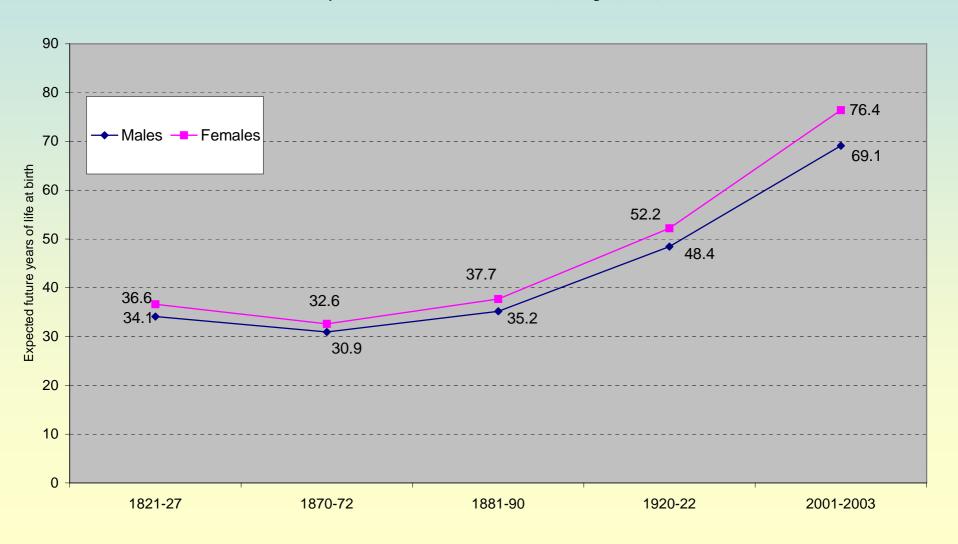




# Life expectancy

Expected future years of life at birth by gender for Glasgow; 1821-27 to 2001-03

Source: The Report of the Medical Officer for Health, Glasgow, 1925; ONS 2004

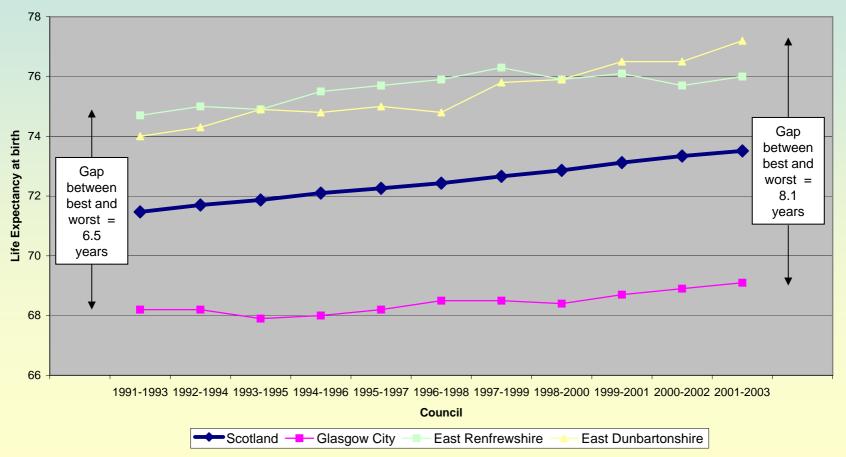




# Life expectancy

Male Life Expectancy at Birth (years); West of Scotland Council Areas vs Scotland; 1991-1993 to 2001-2003

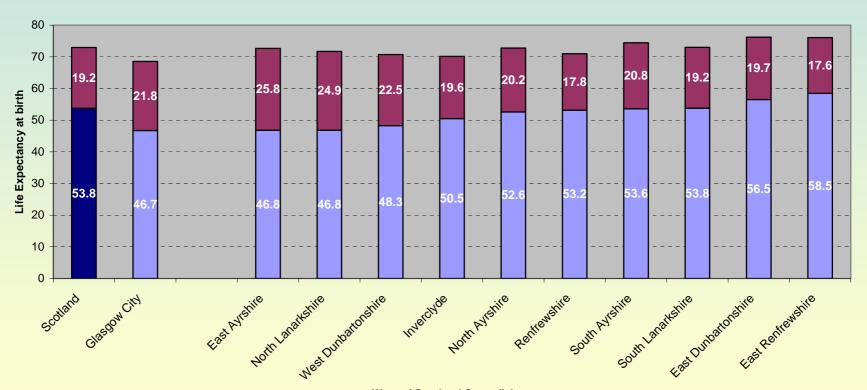
**Source: Office for National Statistics** 





# Healthy Life Expectancy

Life Expectancy vs Healthy Life Expectancy\* at Birth, Males , 1999-2000 Source: ISD Scotland



**West of Scotland Council Area** 

■ HLE at birth ■ Years of life with a LLI

<sup>\*</sup> defined as absence of Limiting Longterm Illness (LLI)



# Economy

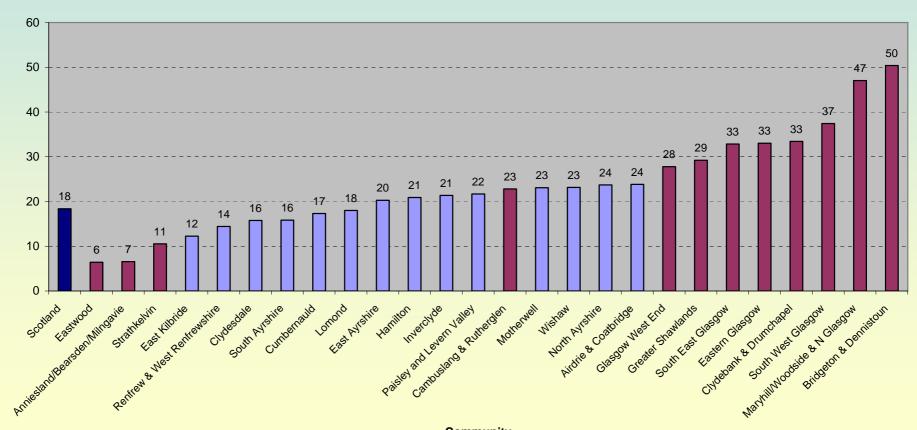


## Children in workless households

% of dependent children living in households where no-one is in employment; 2001;

West of Scotland and Glasgow communities

Source: NHSHS Community Health Profiles, 2004 (from 2001 Census data)

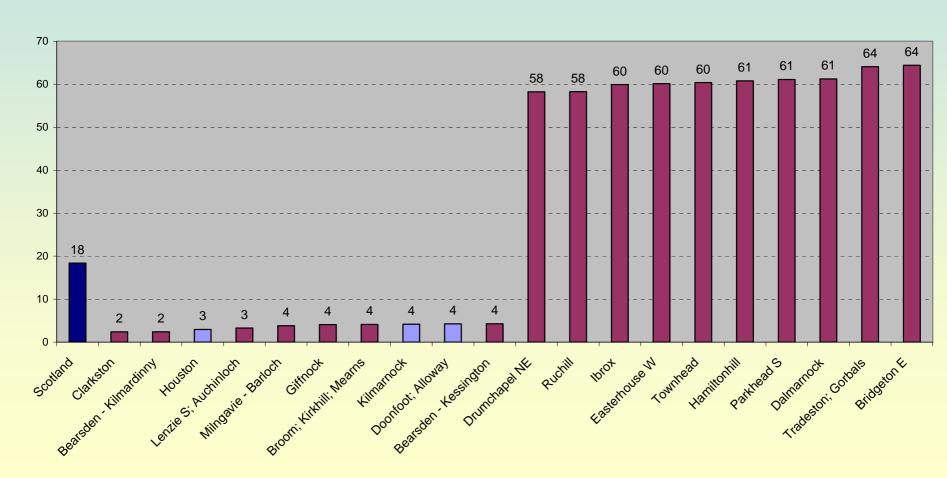


Community



#### Children in workless households

% of dependent children living in households where no-one is in employment; 2001 Glasgow & West of Scotland small areas with 10 highest, and lowest, rates Source: NHSHS Community Health Profiles, 2004 (from 2001 Census data)

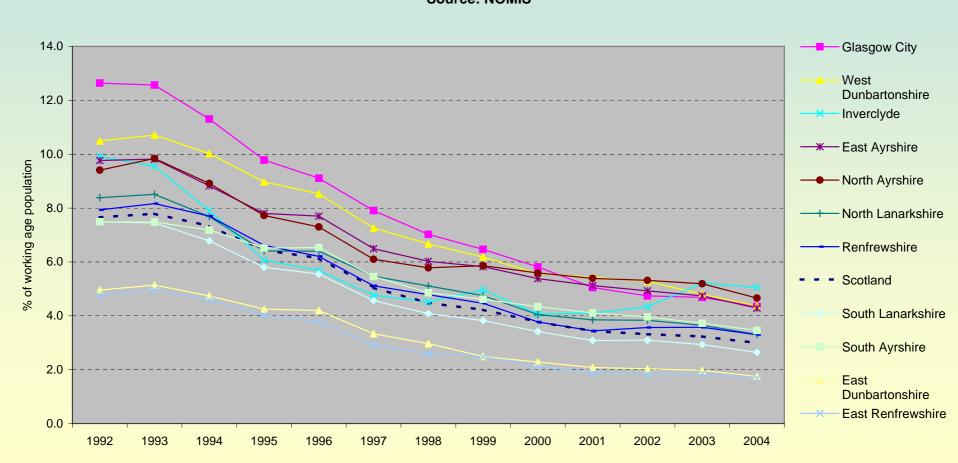




# Unemployment

Unemployment claimant count expressed as percentage of working age population - West of Scotland local authority areas, 1992-2004

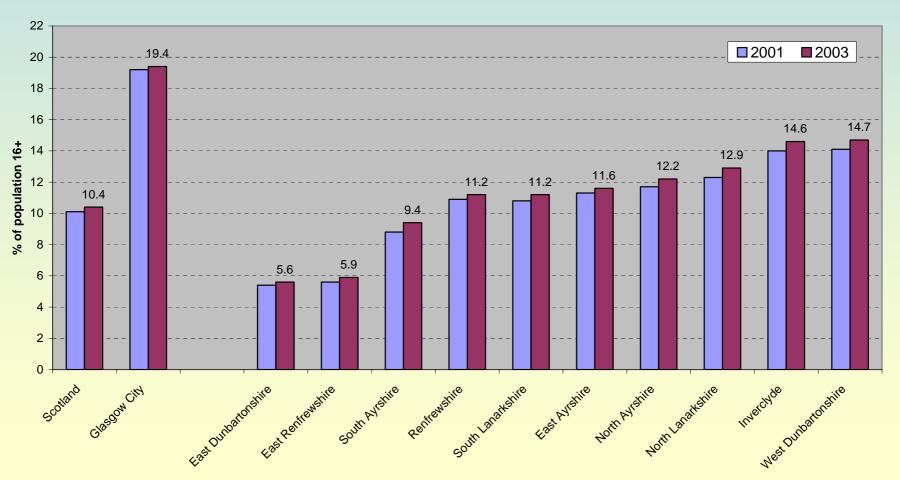
Source: NOMIS





# Income support

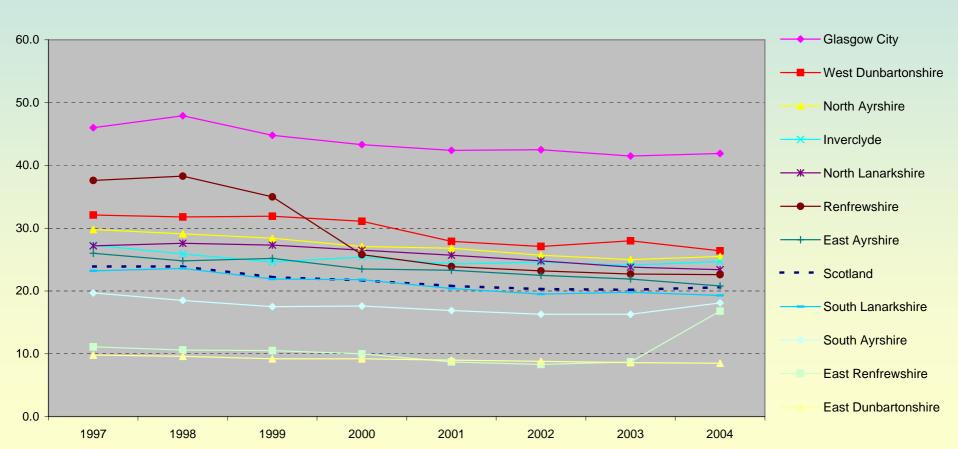
% of population over 16 claiming Income Support; West of Scotland Councils, 2001 - 2003 Source: Scottish Neighbourhood Statistics (originally from DWP)





#### Free school meals

Primary school pupils entitled to free school meals, by West of Scotland local authority, 1997-2004
Source: Scottish Executive Education Department





## House Prices Trend

Average House Price, Glasgow City & Scotland 1993-2004 Source: Scottish Neighbourhood Statistics





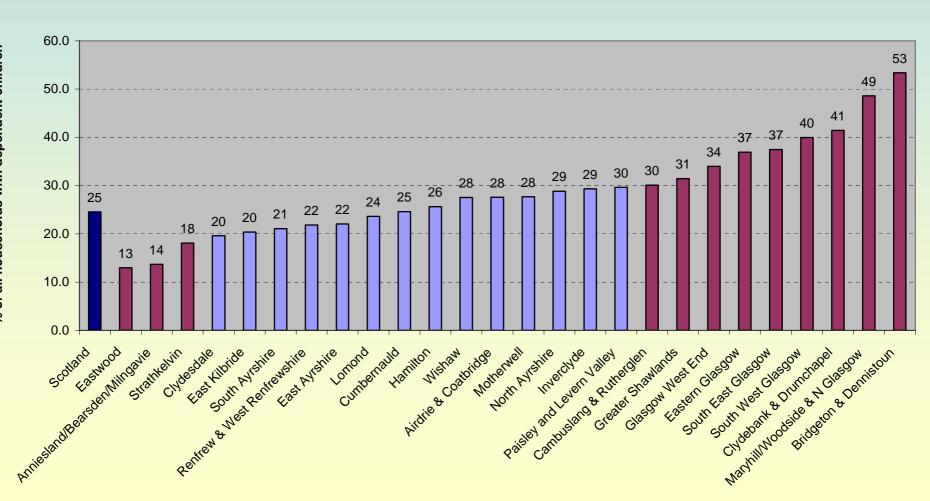
## Social environment



% of all households with dependent children

# Lone parents

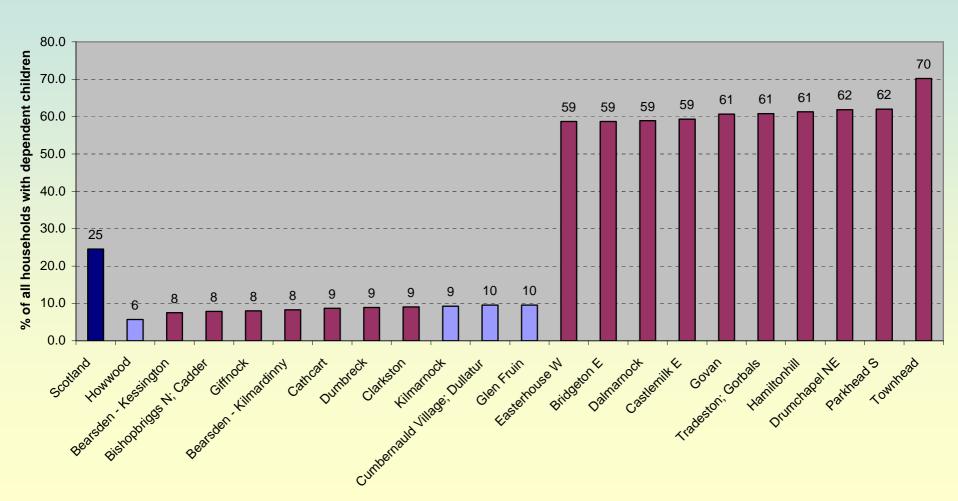
Lone parent households with dependent children, Glasgow & West of Scotland communities, 2001 Source: 2001 Census





# Lone parents

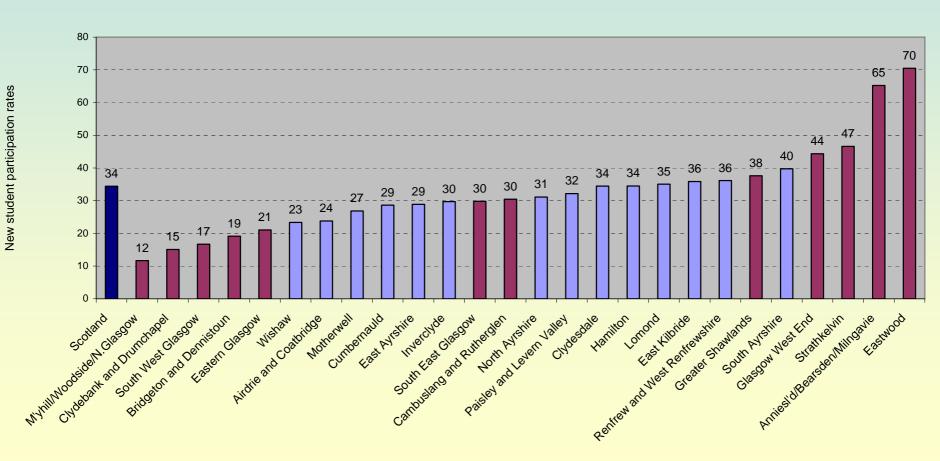
Lone parent households with dependent children
Glasgow & West of Scotland small areas with 10 highest, and lowest, rates, 2001
Source: 2001 Census





#### Education

Estimated new student participation rates in Higher Education,
West of Scotland and Glasgow communities, 2001/02 - 2003/04 (annual average rate)
Source: HESA

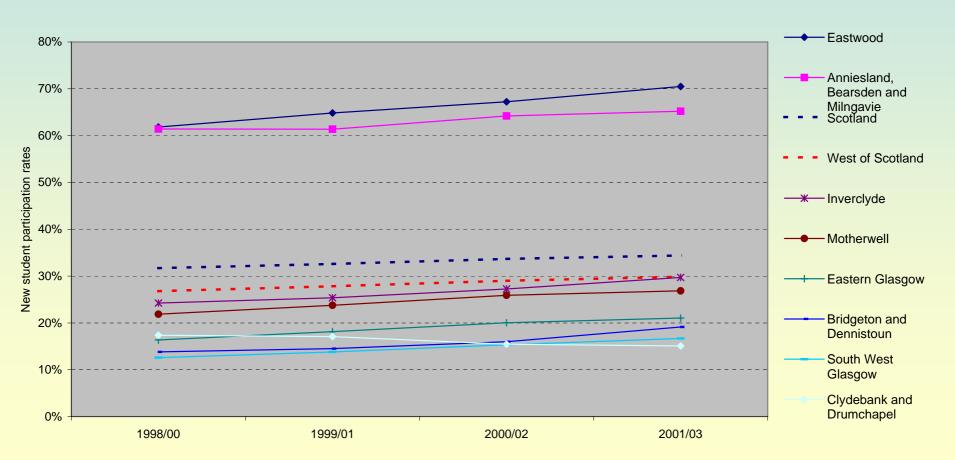




## Education

Trends in (estimated) new student participation rates in Higher Education, Selected West of Scotand communities, 1998/00 - 2001/03 (annual average rates)

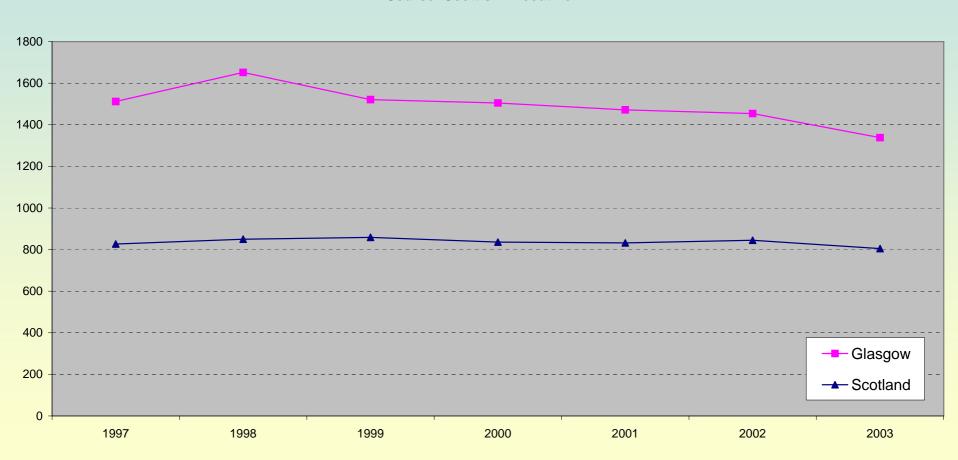
Source: HESA





# Crime

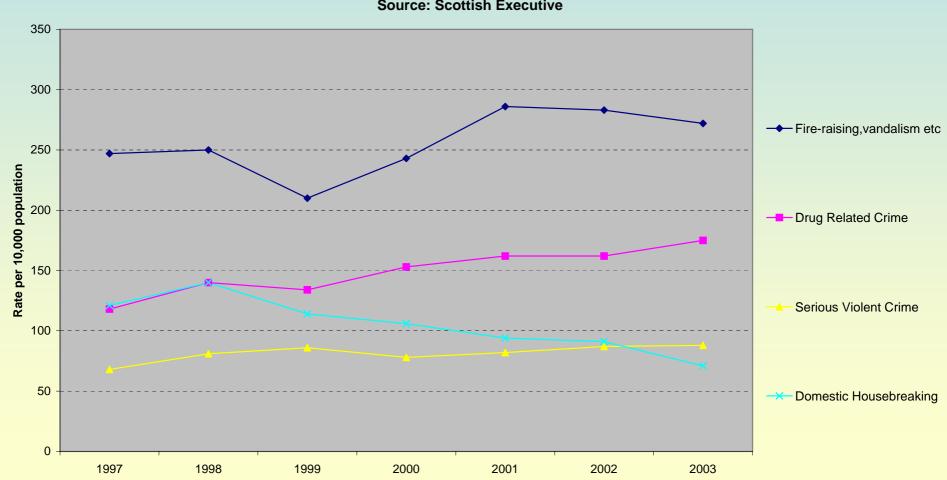
All crimes per 10,000 population, Glasgow City & Scotland, 1997-2003
Source: Scottish Executive





# Crime

Crime rates (selected categories), Glasgow City, 1997-2003
Source: Scottish Executive



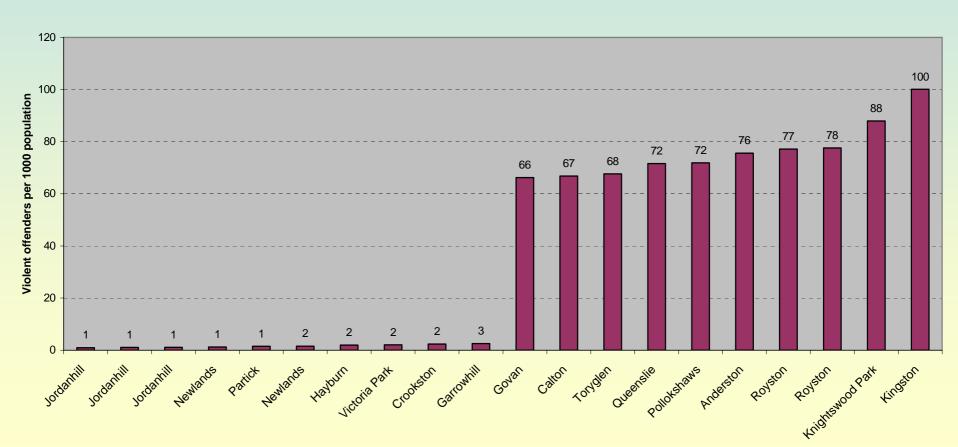


#### Violent crime - offenders

Violent offenders per 1,000 population, Glasgow City, July 2002 - June 2005

Datazones with 10 highest rates vs. datazones with 10 lowest rates (over 3 years)

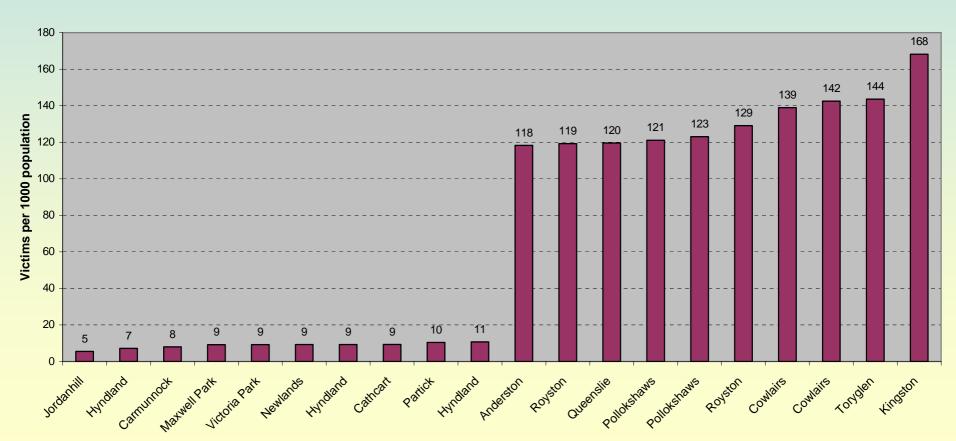
Source: Violence Reduction Unit, Strathclyde Police





## Violent crime - victims

Victims of violent crime per 1,000 population, Glasgow City, July 2002 - June 2005 Datazones with 10 highest rates vs. datazones with 10 lowest rates (over 3 years) Source: Violence Reduction Unit, Strathclyde Police



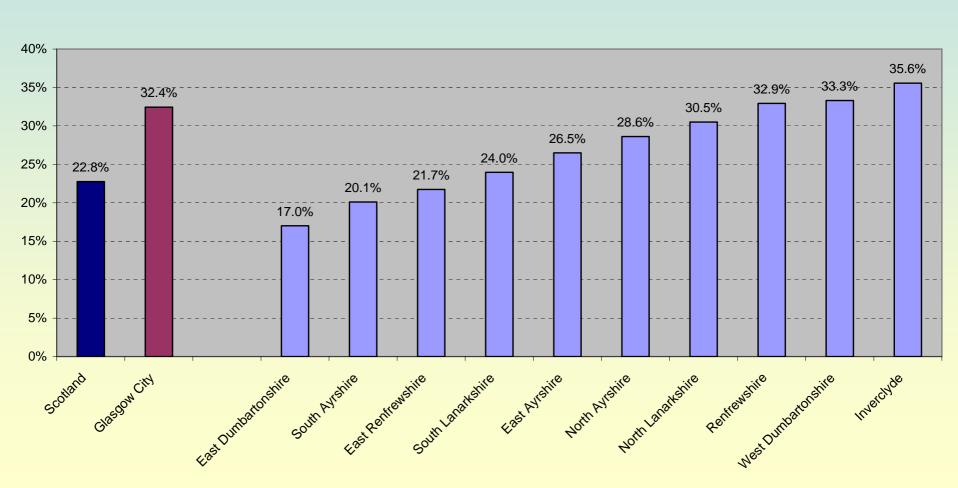
Location of datazone (named after relevant electoral ward)



## Fear of crime

Fear of Crime - percentage of respondents stating they don't feel safe walking in their neighbourhood alone after dark, West of Scotland council areas, 2003-04

Source: Scottish Household Survey



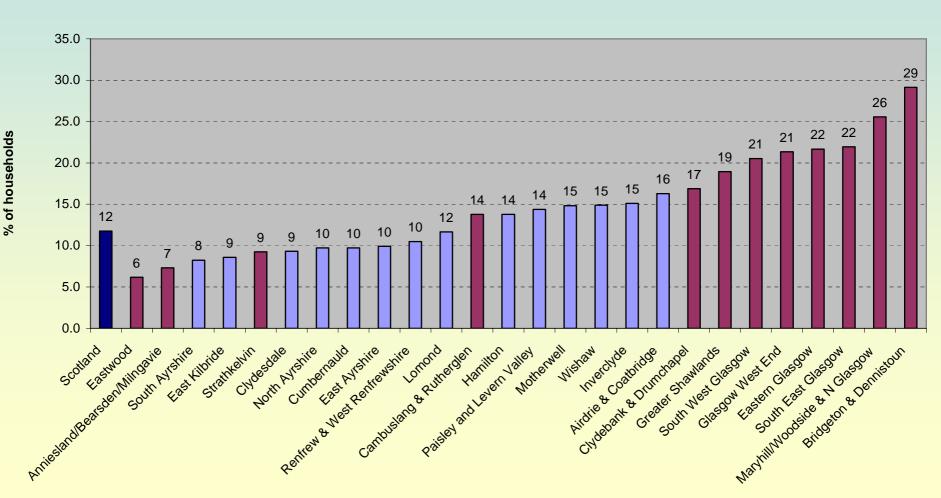


# Physical environment



# Overcrowding

Proportion of households classed as overcrowded, West of Scotland and Glasgow Communities, 2001 Source: Census/NHSHS Community profiles

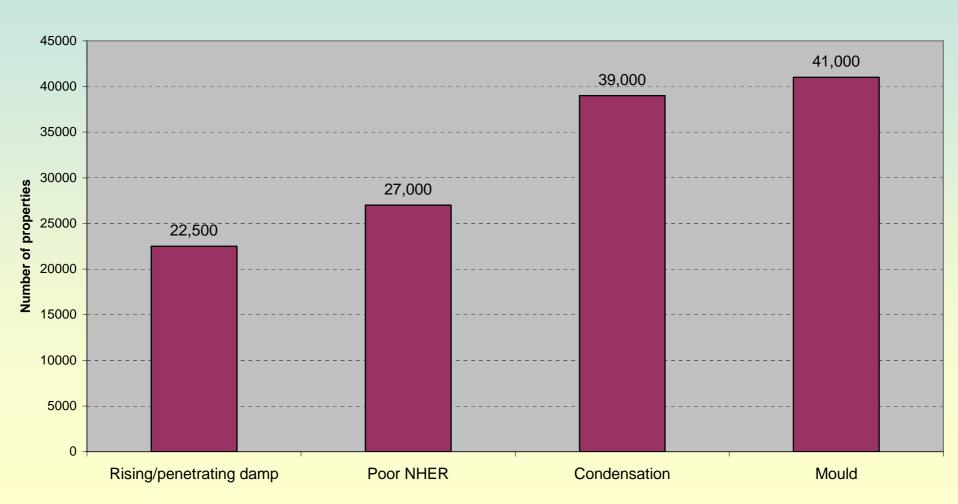




#### House condition

Estimated numbers of properties with damp, condensation, mould, poor National Home Energy Rating (NHER), Greater Glasgow 2002

Source: SHCS

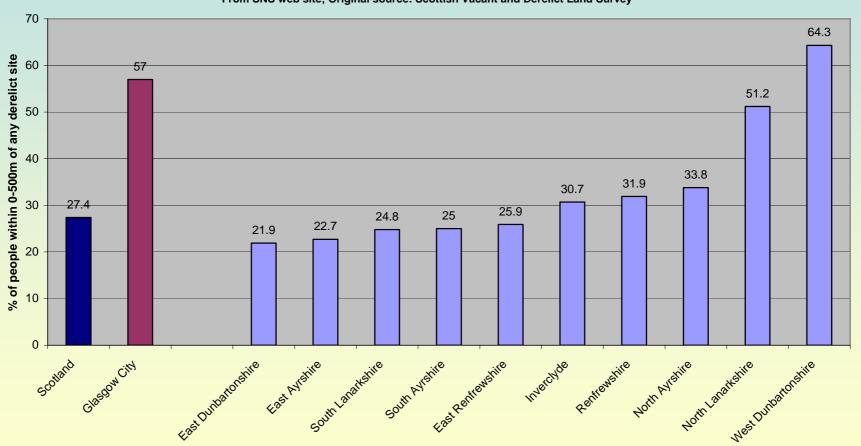




# Proximity to Derelict Land

Proximity to Derelict Sites; % of people within 0-500m of any derelict site; 2004; West of Scotland Councils & Scotland

From SNS web site; Original source: Scottish Vacant and Derelict Land Survey



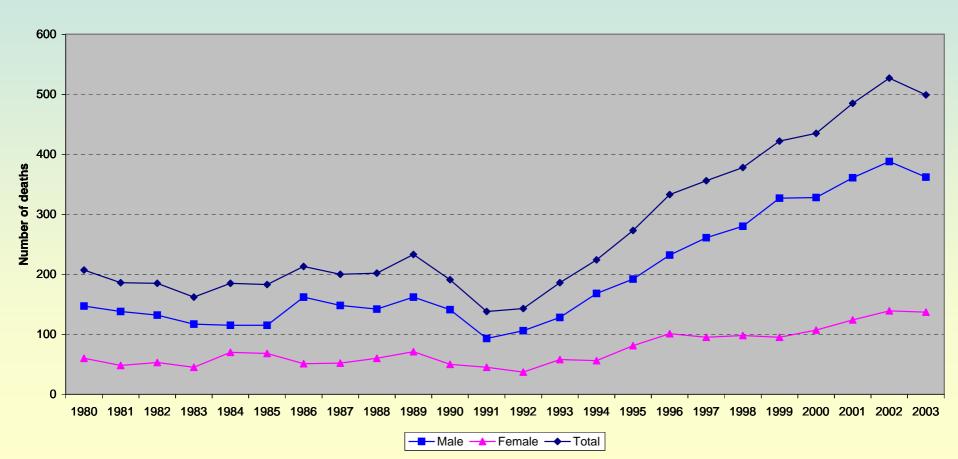


# Behaviour



# Alcohol related mortality

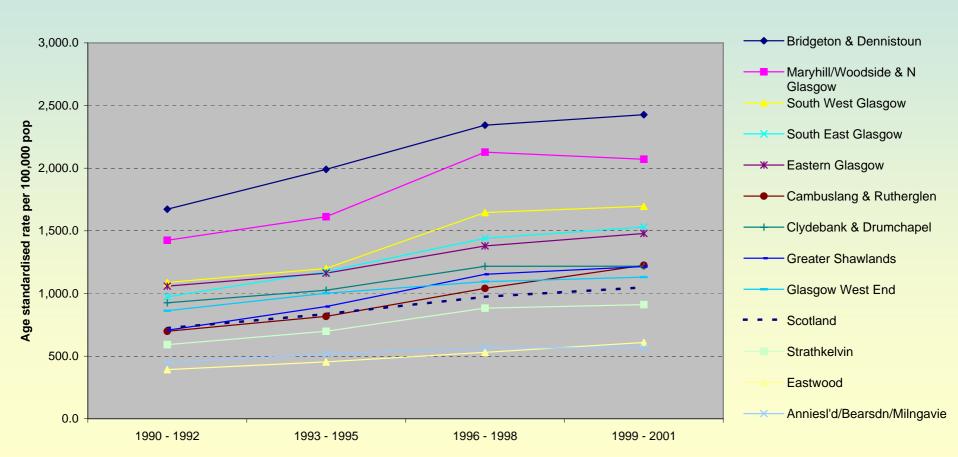
Numbers of alcohol related deaths, NHS Greater Glasgow, 1980-2003
Principal ("underlying") and secondary ("contributing") causes of death
Source: GRO(S)





# Alcohol hospitalisations

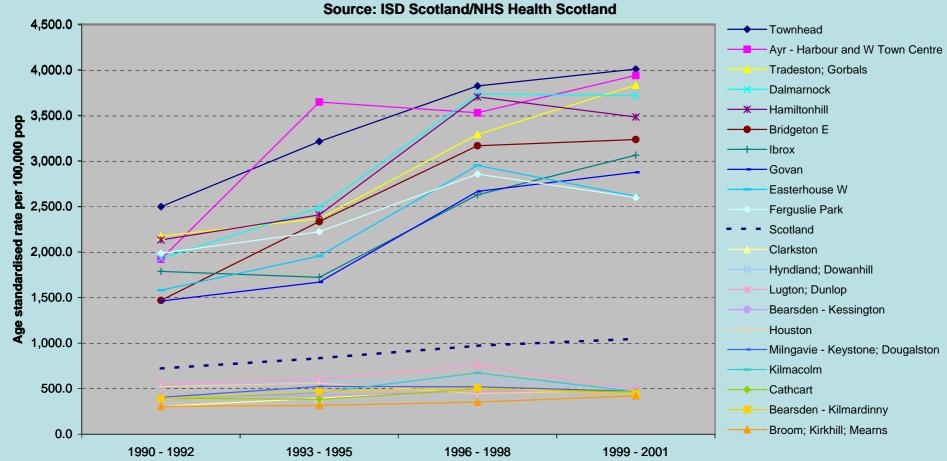
Alcohol related & attributable hospital admissions
by Glasgow "community", age-standardised rates, 1990/92 - 1999/01
Source: ISD Scotland/NHS Health Scotland





### Alcohol hospitalisations

Alcohol related & attributable hospital admissions for West of Scotland small areas (with lowest & highest rates in 1999/2001), age-standardised rates, 1990/92 - 1999/01



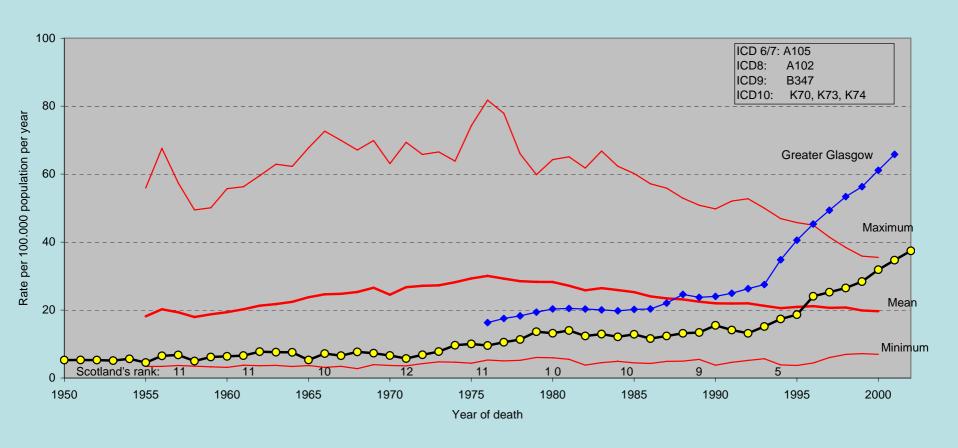


## Liver cirrhosis mortality

Liver cirrhosis mortality age standardised rates among men aged 15-74 years

Scotland in context of maximum, minimum, and mean rates for 16 Western European countries

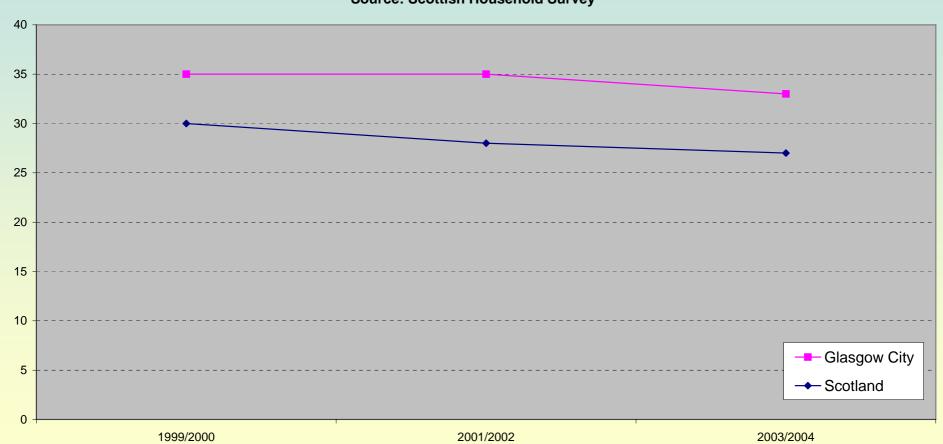
Source: WHOSIS (Dec 2004)





## **Smoking**

Percentage of adults smoking, 1999/00 - 2003/04 Source: Scottish Household Survey





### Sexually Transmitted Infections

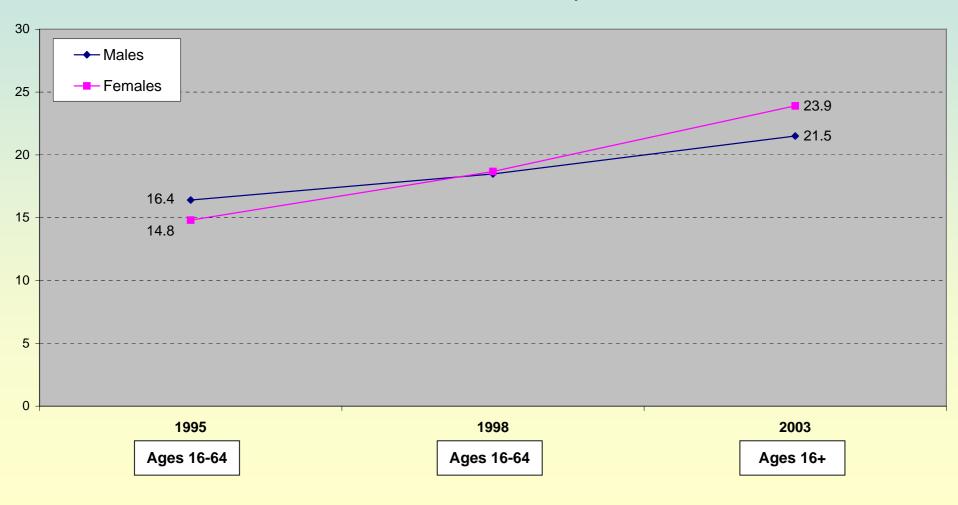
Acute Sexually Transmitted Infection Rates, Greater Glasgow & Scotland
Source: ISD Scotland





## Obesity

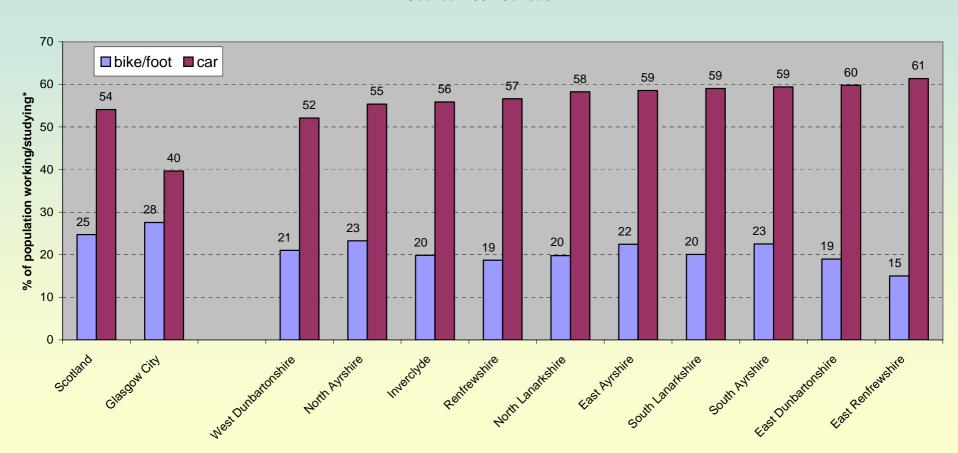
% of adults classed as obese (BMI>30), Greater Glasgow, 1995, 1998 & 2003 Source: Scottish Health Surveys





### Travel

Travel to work/study by bicycle/foot and car, 2001 Source: 2001 Census



<sup>\*</sup> Excludes those working/studying at home



### Travel

Estimates of traffic volume in vehicle kilometres, 1993-2003 Source: SE - Scottish Transport Statistics 2004

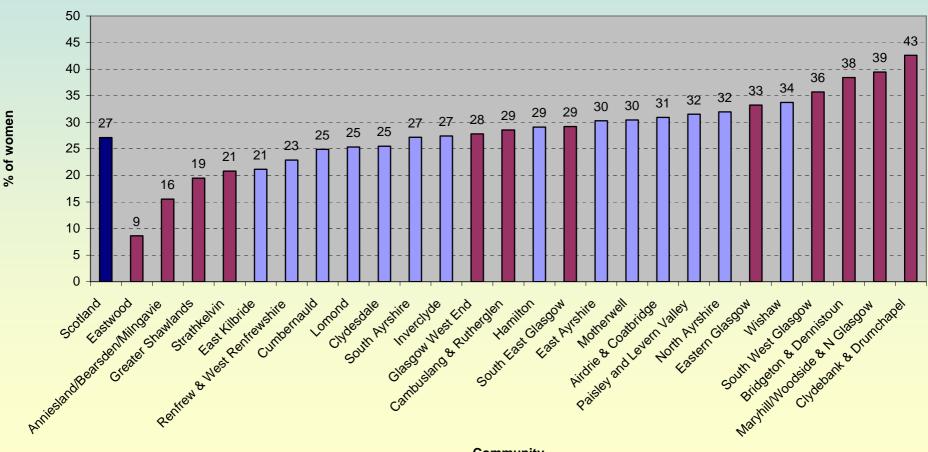




## Pregnancy & childbirth



% Maternal smoking at hospital booking, Glasgow & West of Scotland communities 2000-02 Source: NHS HS - Community Health Profiles, 2004 (from ISD data)

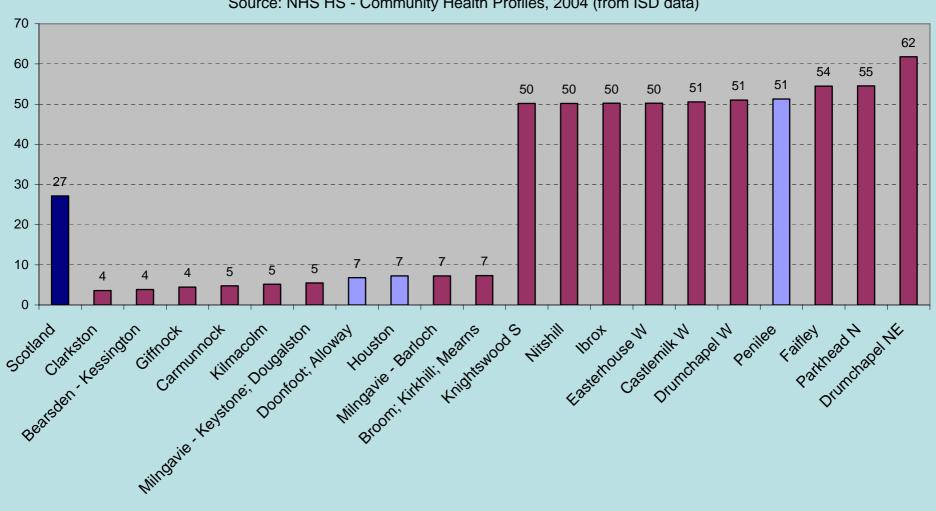


Community



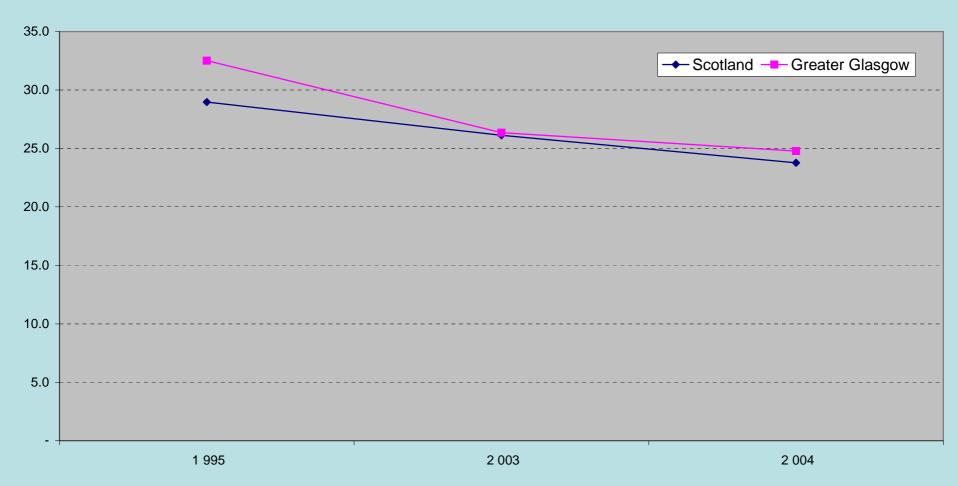
% Maternal smoking at hospital booking, 2000-2002 Glasgow/West of Scotland small areas with 10 highest and 10 lowest rates

Source: NHS HS - Community Health Profiles, 2004 (from ISD data)



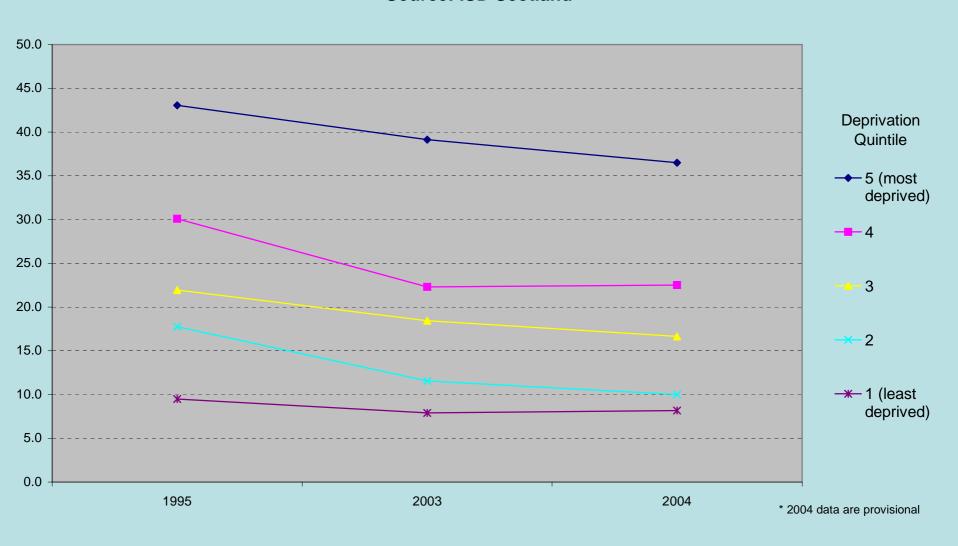


% Maternal smoking at hospital booking, 1995-2004\* Source: ISD Scotland





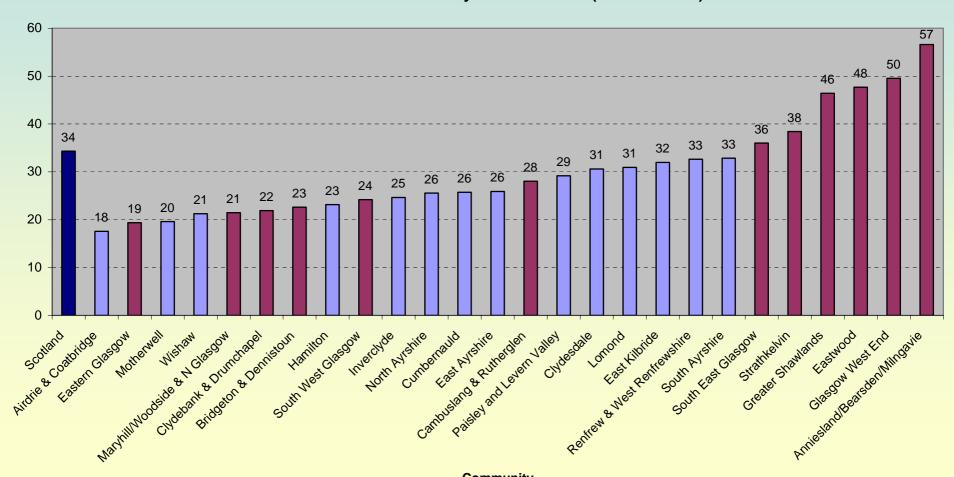
% Maternal smoking at booking by deprivation, NHS Greater Glasgow 1995-2004\*
Source: ISD Scotland





## Breastfeeding

% breastfeeding at 6-8 weeks,
West of Scotland and Glasgow communities 2000-2002
Source: NHSHS - Community Health Profiles (from ISD data)



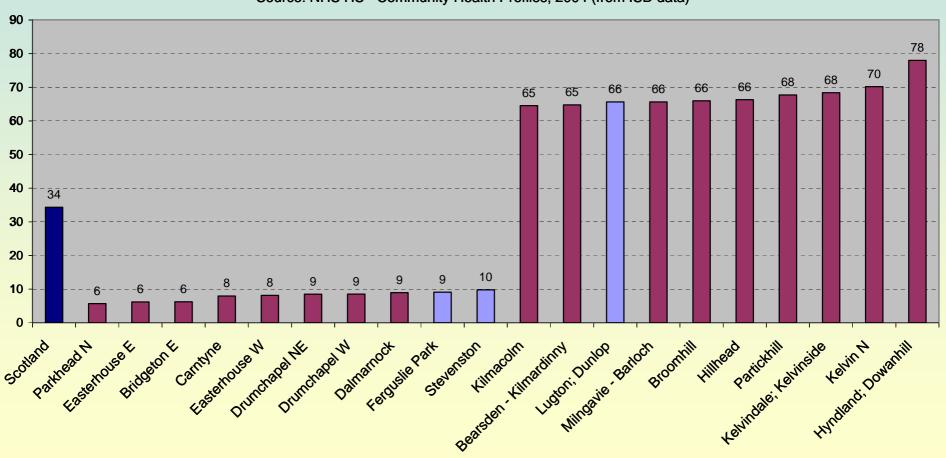
Community



### Breastfeeding

#### % breastfeeding at 6-8 weeks, 2000-2002 Glasgow/West of Scotland small areas with 10 highest and 10 lowest rates

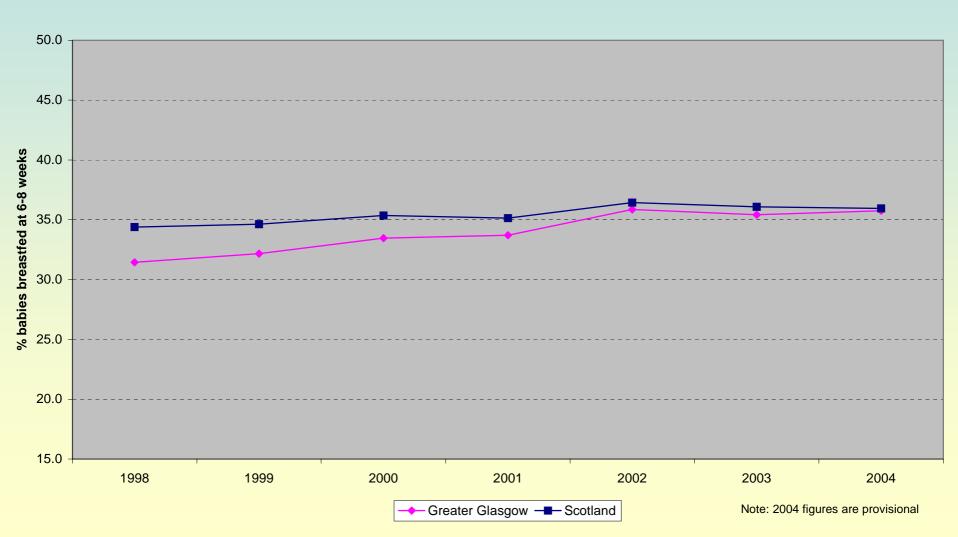
Source: NHS HS - Community Health Profiles, 2004 (from ISD data)





## Breastfeeding

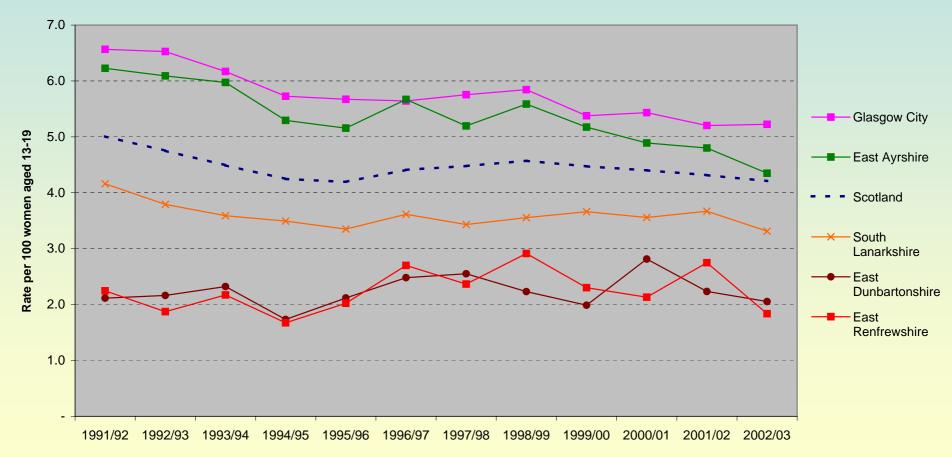
Breastfeeding at 6-8 weeks, NHS Greater Glasgow, 1998-2004 Source: ISD Scotland





### Teenage pregnancy

Teenage Pregnancies (13-19) for selected West of Scotland Councils, 1991/92 - 2002/03
Source: ISD Scotland



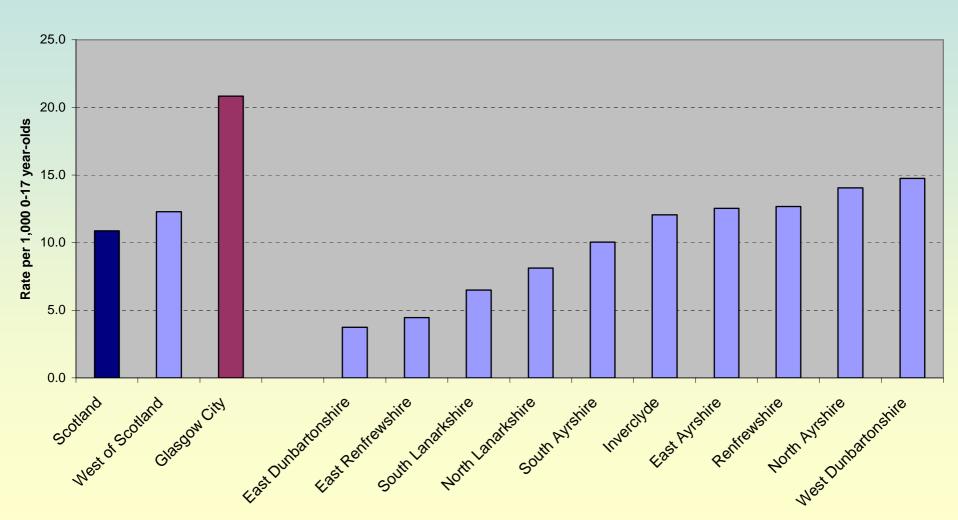


### Children



### Looked after Children

Looked after children - rate per 1000 0-17 year-olds, 2004 Source: Care Scotland





### Looked after Children

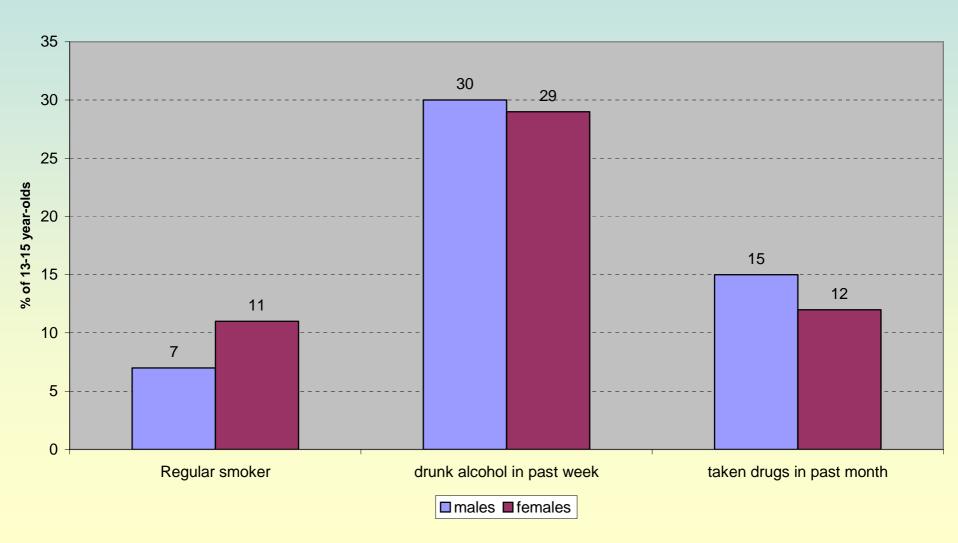
Looked after children - rate per 1000, three year rolling average, 1998 - 2004 Source: Care Scotland



# Centre for Population Smoking, drinking & drug use

Smoking, alcohol & drug use among 13 and 15 year-olds in Greater Glasgow, 2002

Source: SALSUS





### Dental health

Percentage of 5 year-olds with no decayed/missing/filled teeth ('zero caries'), Scotland & Greater Glasgow 1987/99 - 2003/04
Source: NDIP & SHBDEP

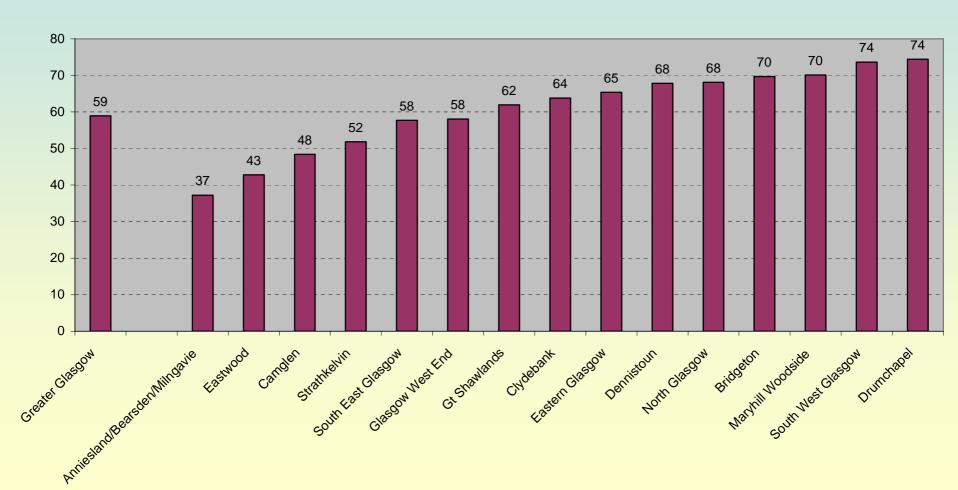




### Dental health

Dental decay: % of 5 year-old children with obvious/advanced decay (risk level 2-3) by LHCC area, Greater Glasgow 2003-04

**Source: NDIP** 



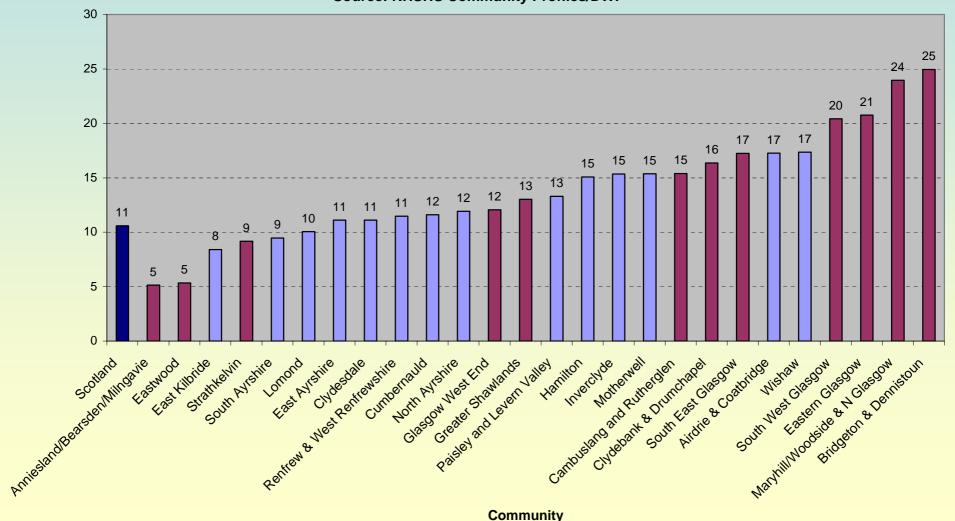


### Health & function



#### Adults unable to work due to illness/disability

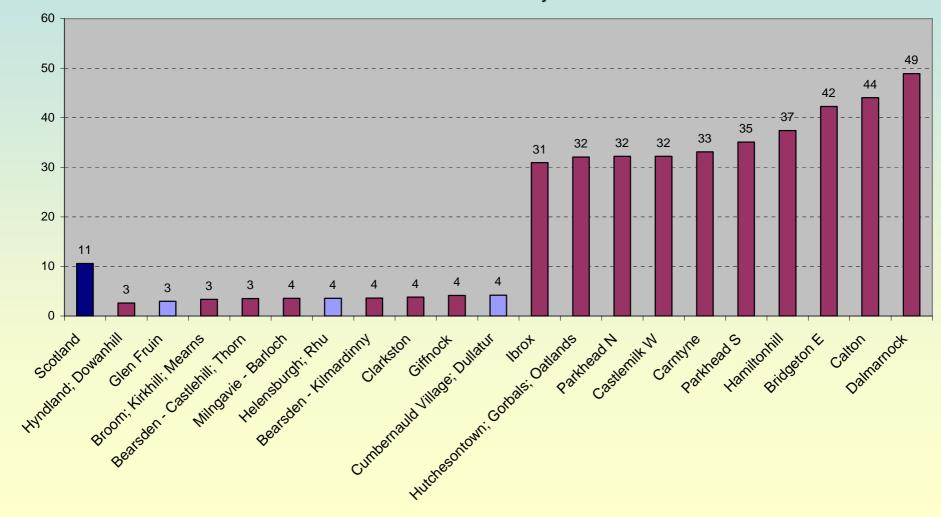
Percentage of adults unable to work due to illness/disability,
Glasgow/West of Scotland communities, 2000
Source: NHSHS Community Profiles/DWP





#### Adults unable to work due to illness/disability

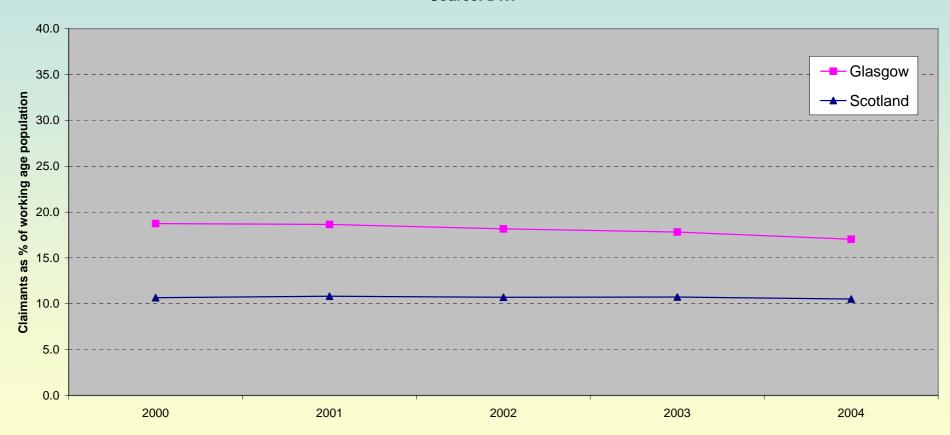
% of adults unable to work due to illness/disability, 2000
Glasgow & West of Scotland small areas with 10 highest and 10 lowest rates
Source: NHS HS - NHSHS Community Profiles/DWP





#### Adults unable to work due to illness/disability

Adults unable to work due to illness/disability
Incapacity benefit/severe disability allowance claimants, 2000-2004
Source: DWP



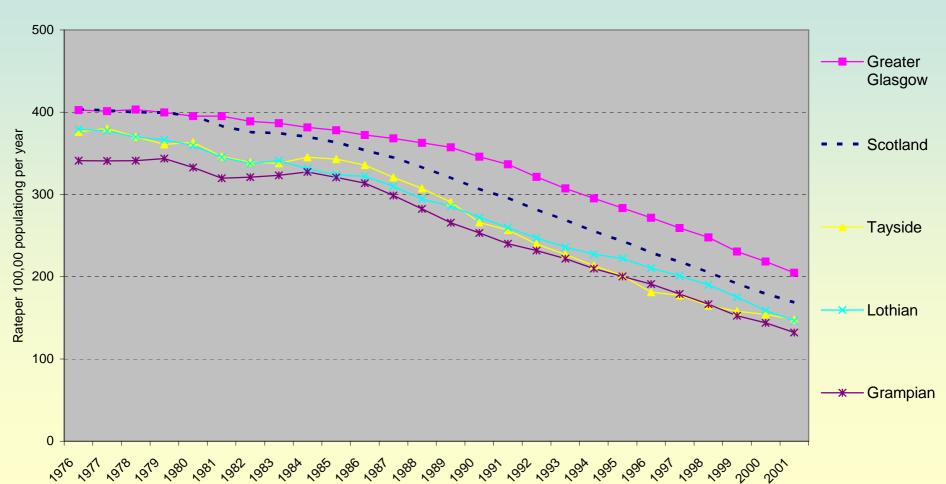


### Illness & disease



### Heart disease mortality

Ischaemic Heart Disease: age standardised death rates, males (15-74)
Scotland and large Health Boards, 1976-2001
Source: GRO(S)

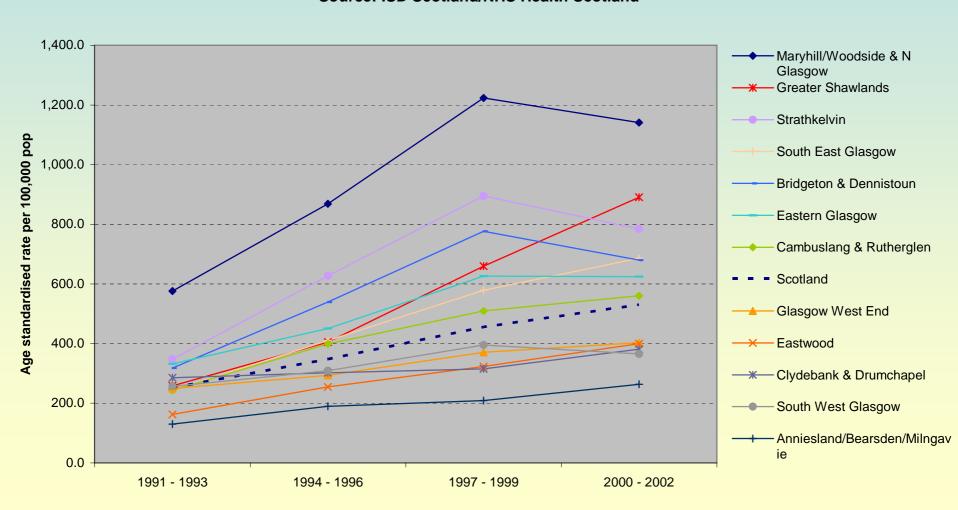




### Diabetes

Admissions to hospital for <u>diabetes</u> by Glasgow "community", age-standardised rates, 1991/93 - 2000/02

Source: ISD Scotland/NHS Health Scotland

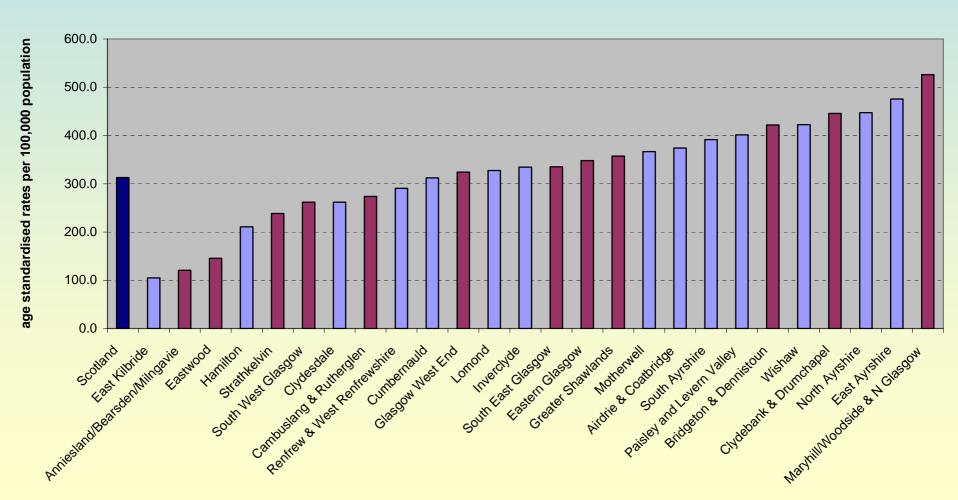




### Deliberate self harm

Hospital admissions for <u>deliberate self harm</u>, average annual age-standardised rates, 2000-2002, Glasgow & West of Scotland communities

Source: ISD Scotland/NHSHS Community Profiles





## Summary



## What's getting better?

- Life expectancy increasing overall
- Downward trends in:
  - smoking
  - unemployment
  - teenage pregnancies
  - some crimes
  - dental health of children
  - breastfeeding
  - some specific causes of death
- Improvements in some aspects of housing
- More entrants to higher education



### What's proving resistant to change?

- Some behaviours e.g.
  - dental health of children
  - breastfeeding
- Many features of the circumstances in which people live e.g.
  - Poverty/low income
  - Looked after children
- Levels of disability
  - adults unable to work
  - healthy life expectancy



## What's getting worse?

- Alcohol related illness
- Obesity levels
- Sexually transmitted disease
- Traffic levels
- Violent crime
- Inequalities in many health related areas

### Glasgow - Past & Present

Big trends

James Arnott

From indicators to insights

Anne Scoular

Integrated public health profile

David Walsh & Bruce Whyte



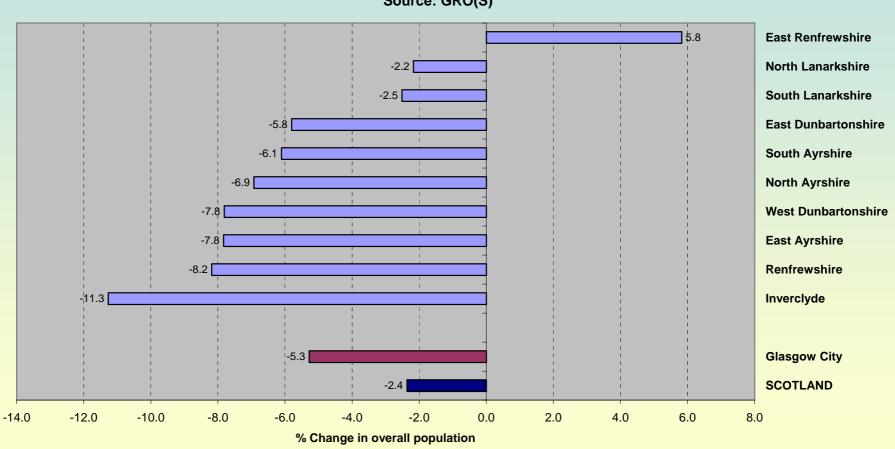
## Glasgow - Future





## Population projections

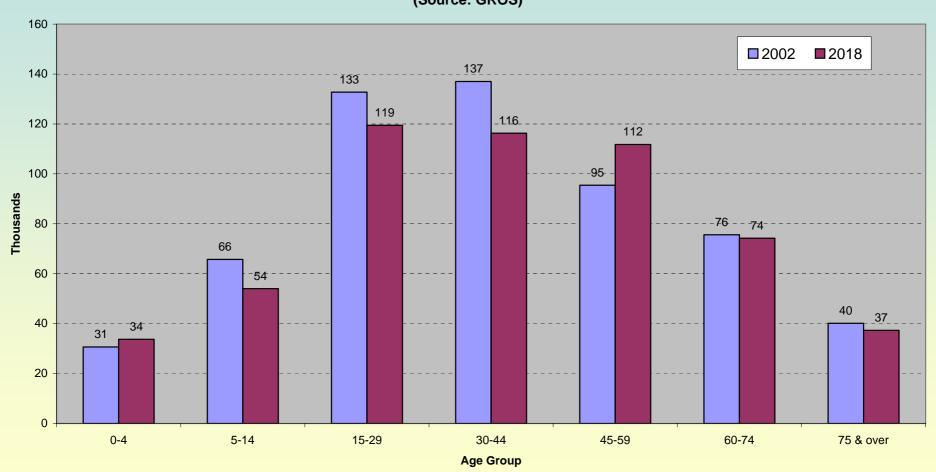
Projected Population Changes in Scotland, 2002- 2018, Scotland and West of Scotland Local Authorities Source: GRO(S)





### Population projections

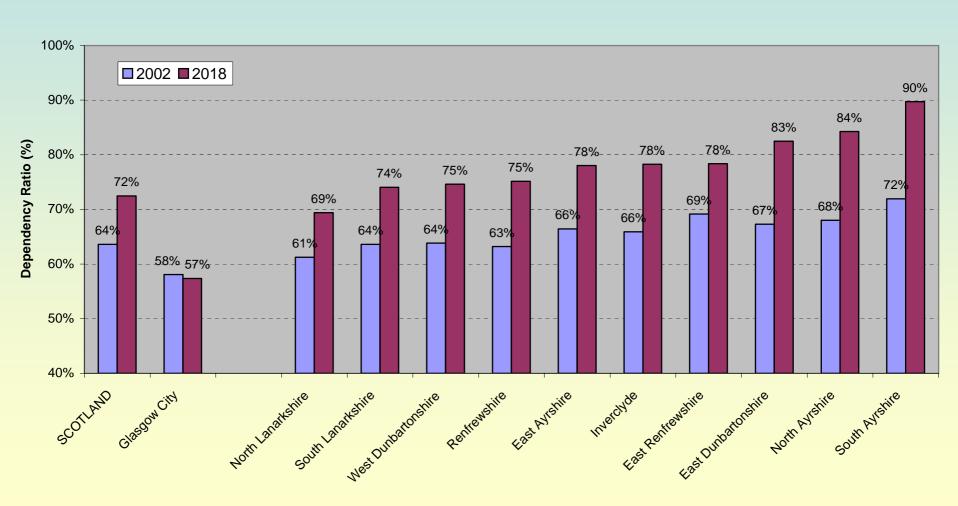
Population Projections for Glasgow, all persons by age band, 2002 vs 2018 (Source: GROS)





### Dependency ratios

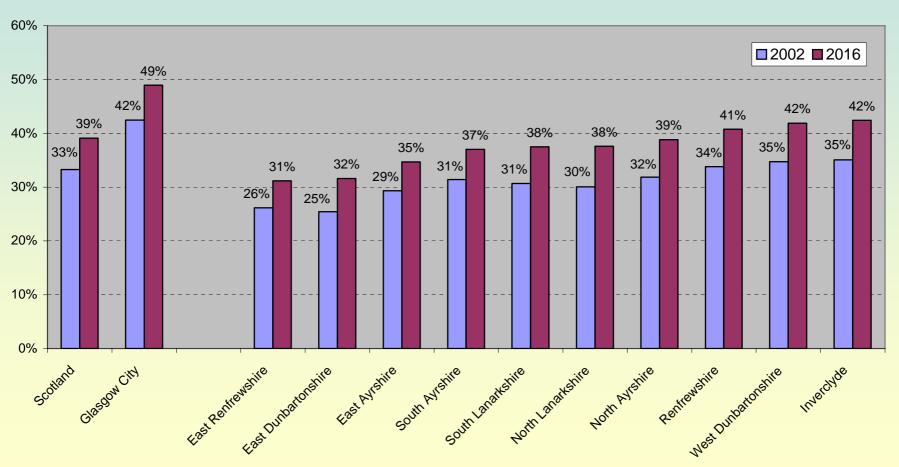
Dependency Ratio Projections for Scotland and WoS Councils, 2002 and 2018
Source: derived from GROS data





### Single person households

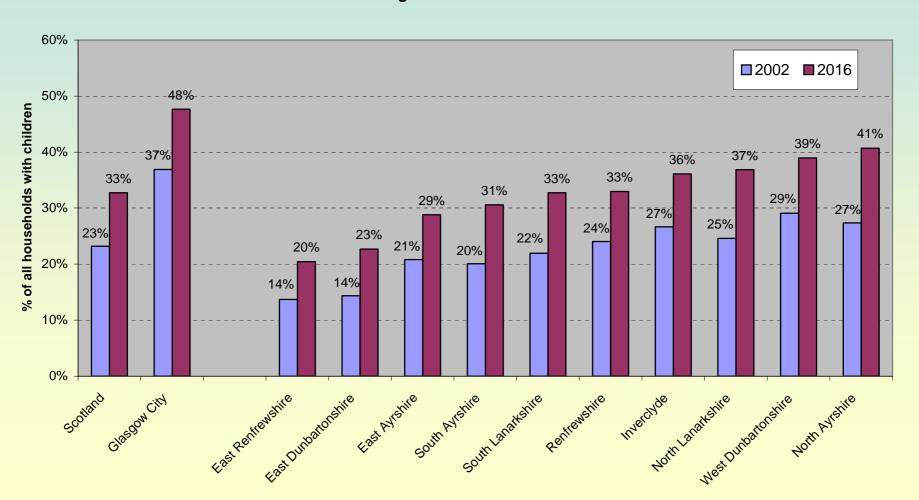
Projected change in % of single adult households, West of Scotland Councils, 2002 vs 2016 Source: GRO(S)





### Lone parent households

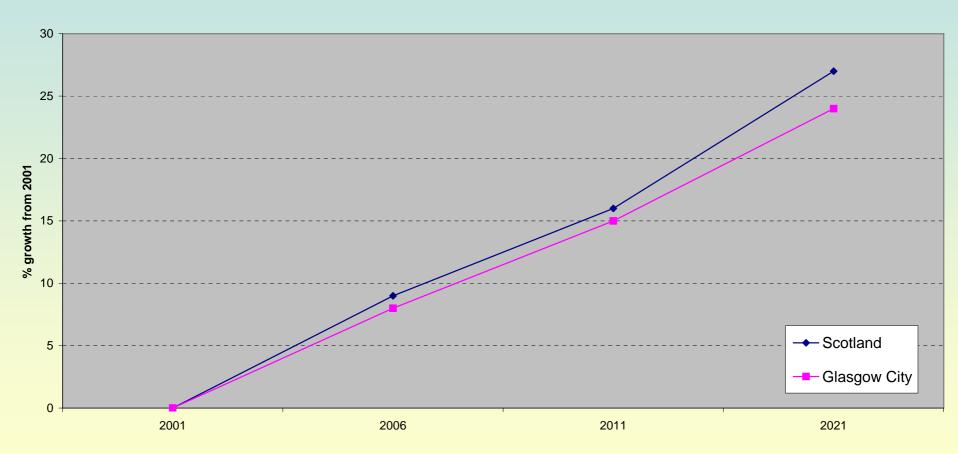
Projected change in lone parent households West of Scotland councils, 2002 vs. 2016 Source: Register General Office of Scotland





### **Traffic Growth**

Background traffic growth from 2001, Scotland & Glasgow\*
Source: Scottish Executive

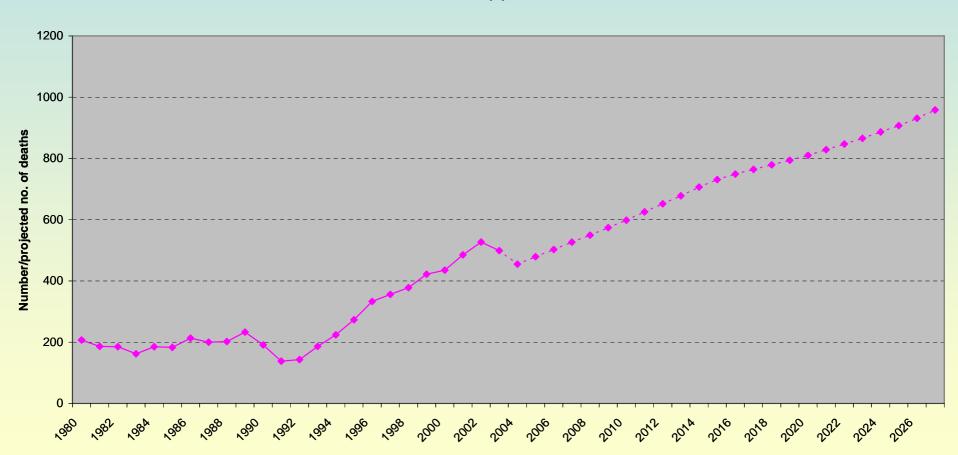


<sup>\*</sup> all traffic originating from Glasgow City



### Alcohol

Alcohol related mortality, Greater Glasgow: deaths 1980-2003 and projections 2004-2027 Source: GRO(S)/NHSHS





## Life expectancy

Male Life Expectancy at Birth (years); West of Scotland Council Areas vs Scotland;

Trend: 1991-1993 to 2001-2003; Projections: 2002-2004 to 2011-2013

Source: Office for National Statistics & Health Scotland

