

Alcohol outlets, drinking and health in Scotland

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Outline

- Background:
 - Alcohol as public health challenge
 - Place and alcohol
- Research aims
- Methods
- Findings
- Discussion
- Policy implications

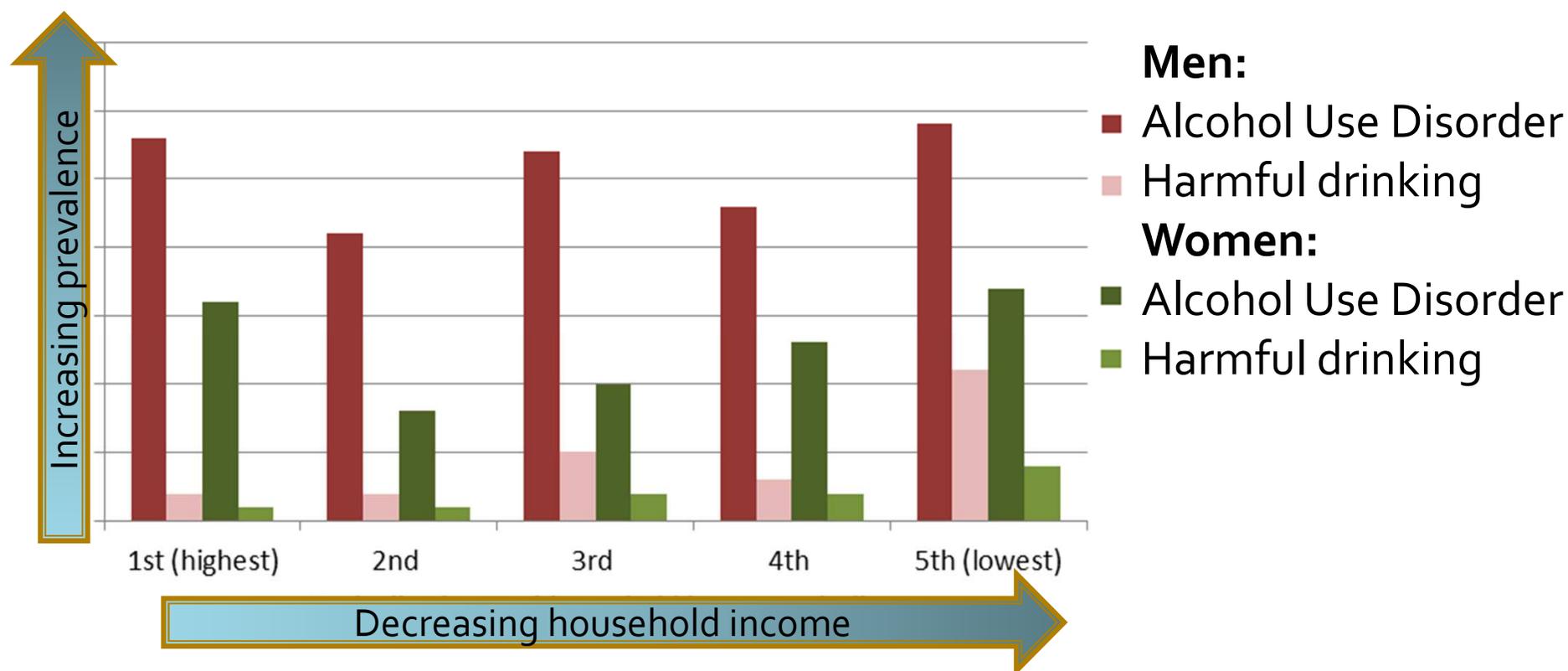
Alcohol as a public health challenge

- Scottish Government:
 - Enough alcohol sold for every adult in Scotland to exceed weekly recommended limits
 - 2010: 23% more alcohol sold per adult in Scotland than in England & Wales (widest gap to date).
 - Alcohol-related hospital discharges quadrupled since early 1980s
 - Estimated cost: £3.6 billion pa
 - Crime and anti-social behaviour
- 2012 Scottish Health Survey:
 - 19% adults: indications of “alcohol use disorder”
 - lowest income group >3 times more likely to report “high-risk drinking”



Alcohol Use Disorder (by income)

- 'Alcohol Use Disorders Identification Test' (AUDIT)
 - A screen for high alcohol use and dependency
 - Source: Scottish Health Survey, 2012



Place and alcohol

- Individual **behavioural** perspectives:
 - wide set of social and cultural factors matter
 - policy response – ‘**lifestyle drift**’
- Drinking is enabled and constrained by **geographical factors**:
 - reality of drinking in everyday life
 - how public health messages received, negotiated and mediated
- Individual factors + environments **produce spaces** that are **more or less favourable** to drinking
 - neighbourhoods, schools, workplaces, etc.



Geographical factors and alcohol



Alcohol retail environment

Local pricing structure



Ease of access

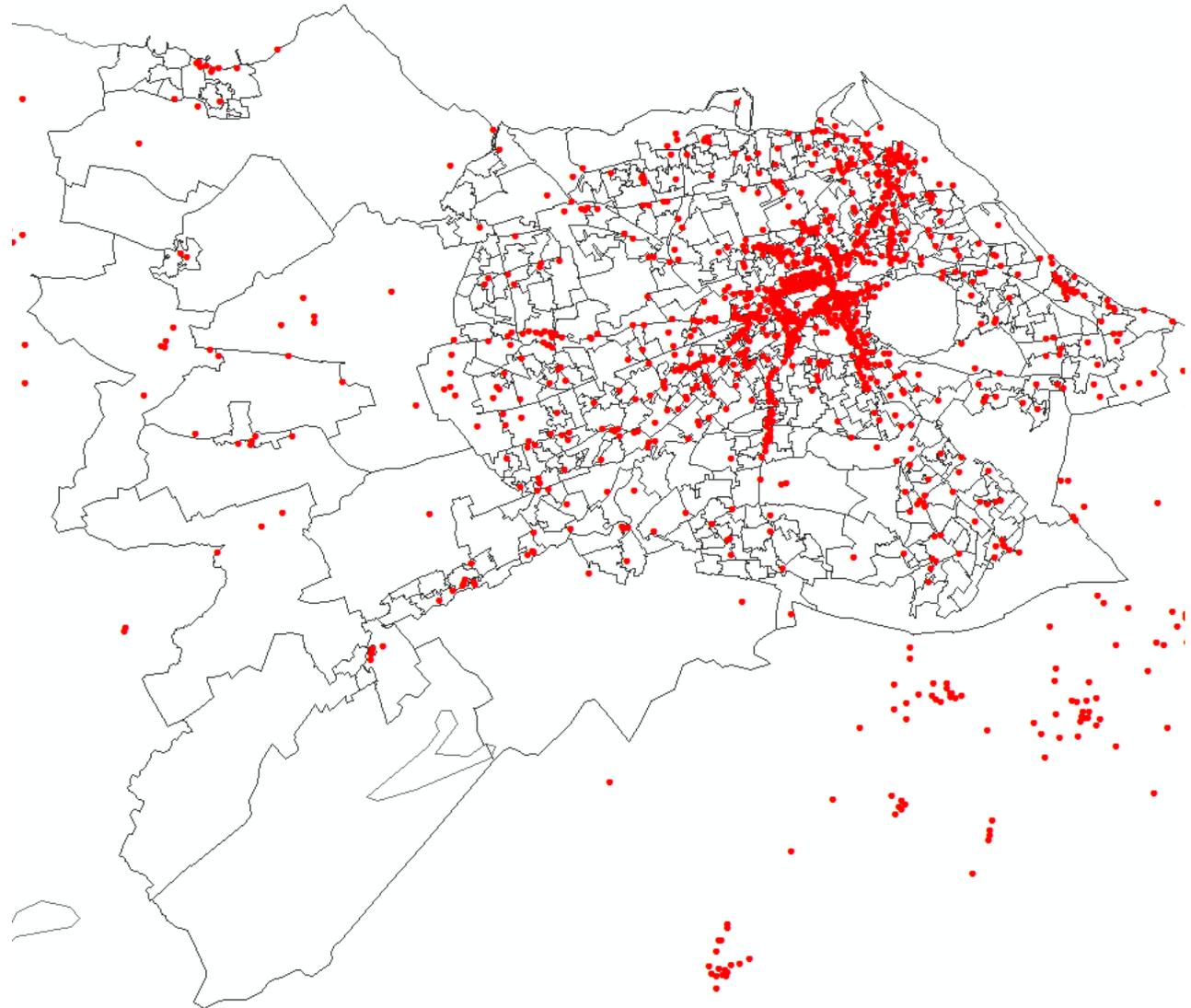
Local norms: alcohol consumption,
knowledge and attitudes

Research aims

- Neighbourhood alcohol retail environments in Scotland:
 - socially patterned?
 - related to local alcohol consumption?
 - related to local alcohol-related health?

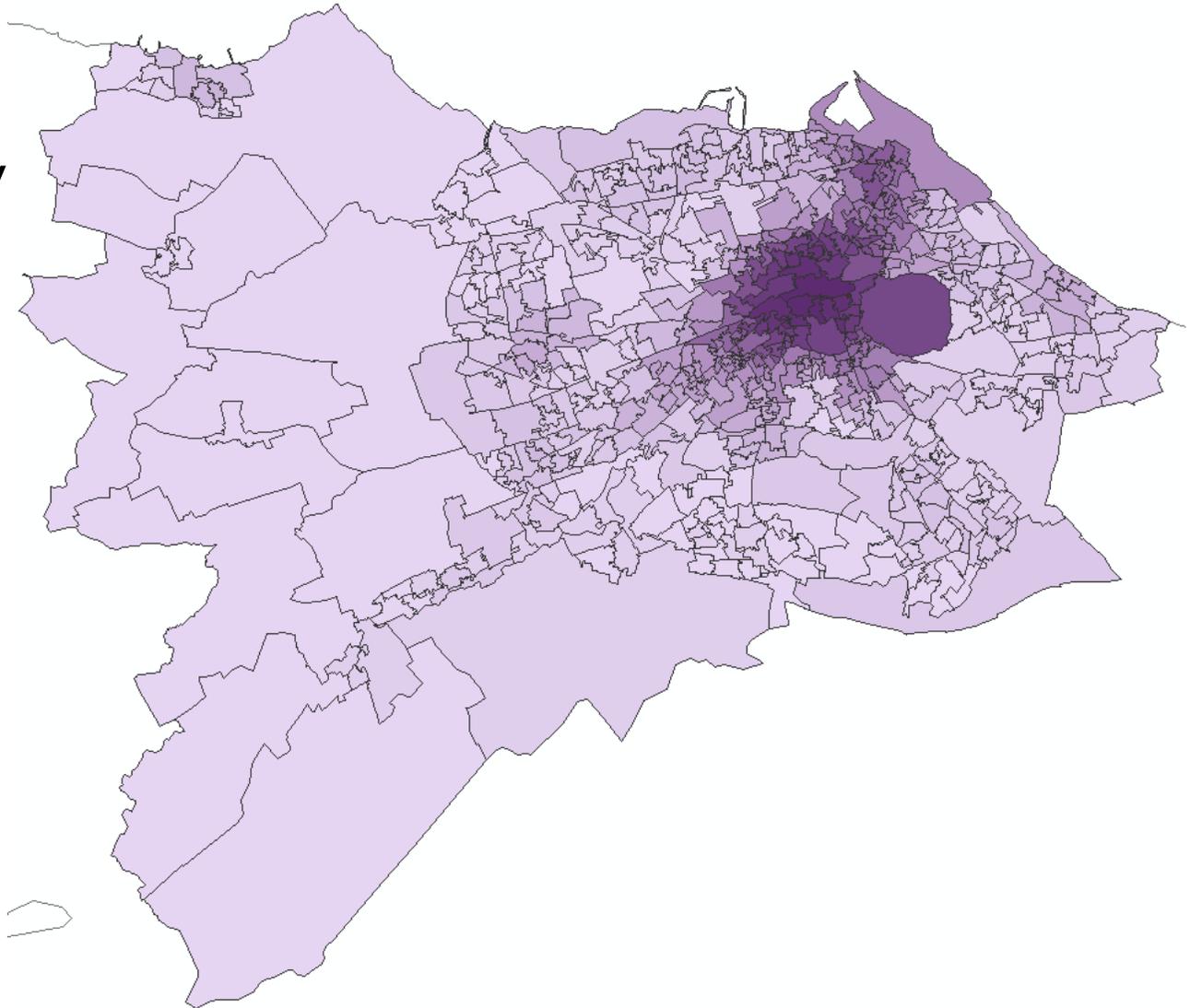
Alcohol outlet data (e.g., Edinburgh)

- Locations of all Scottish licensed premises (2012)
 - 16,159: 4,800 off-sales and 11,359 on-sales
- 'Outlet density measure' for datazones (6505)
 - (N.B. the measure ignores datazone boundaries, just as drinkers do)



Total outlet density by datazone (e.g., Edinburgh)

- Darker =
higher density



Is there a social gradient in outlet density?

[N.B. Graph removed because research not published yet]

- By Scottish Index of Multiple Deprivation 2012 'quintiles' (fifths of all datazones):
 - **Total** outlets density highest in medium to high deprivation datazones (quintiles 3-5)
 - **On-sales** outlet density highest at medium deprivation (quintile 3)
 - **Off-sales** outlet density increases linearly with deprivation: highest for highest deprivation areas (quintile 5)

Drinking and health data

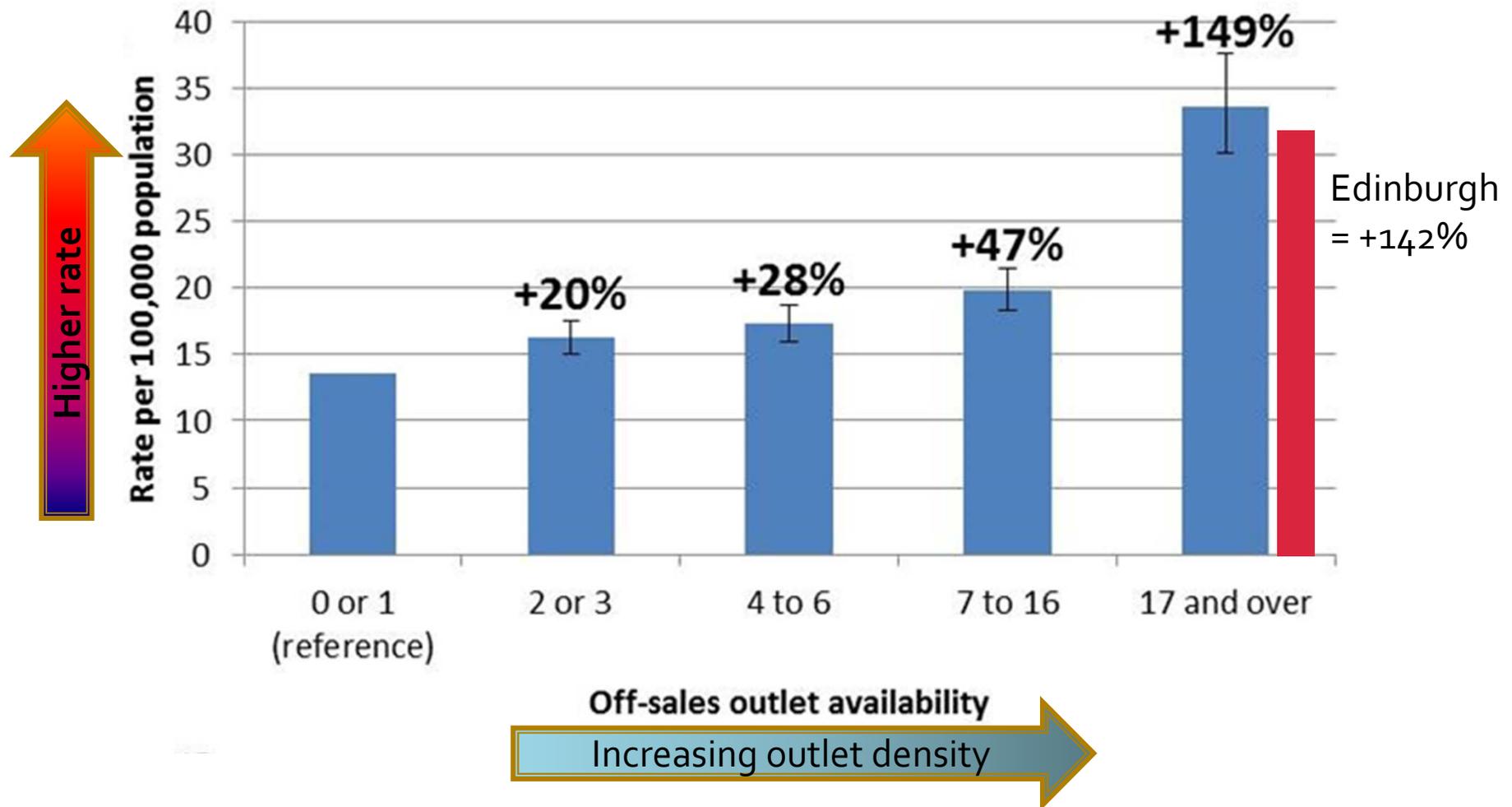
- Drinking:
 - Source: 24,600 adults in Scottish Health Survey (2008-2011)
 - Exceed government recommendations? (21+ or 14+ units/week)
 - Binge drinking? (8+ or 6+ units/day)
- Alcohol-related deaths (by age and sex)
 - Source: General Register Office for Scotland (GROS, 2002-2011)
- Alcohol-related hospitalisations (rate ratio)
 - Source: Scottish Index of Multiple Deprivation (SIMD 2012)
- Datazone-referenced (~neighbourhood of residence)
- Regression analysis: adjusted for important differences between individuals/datazones

Drinking and total outlet density

[N.B. Graphs removed because research not published yet]

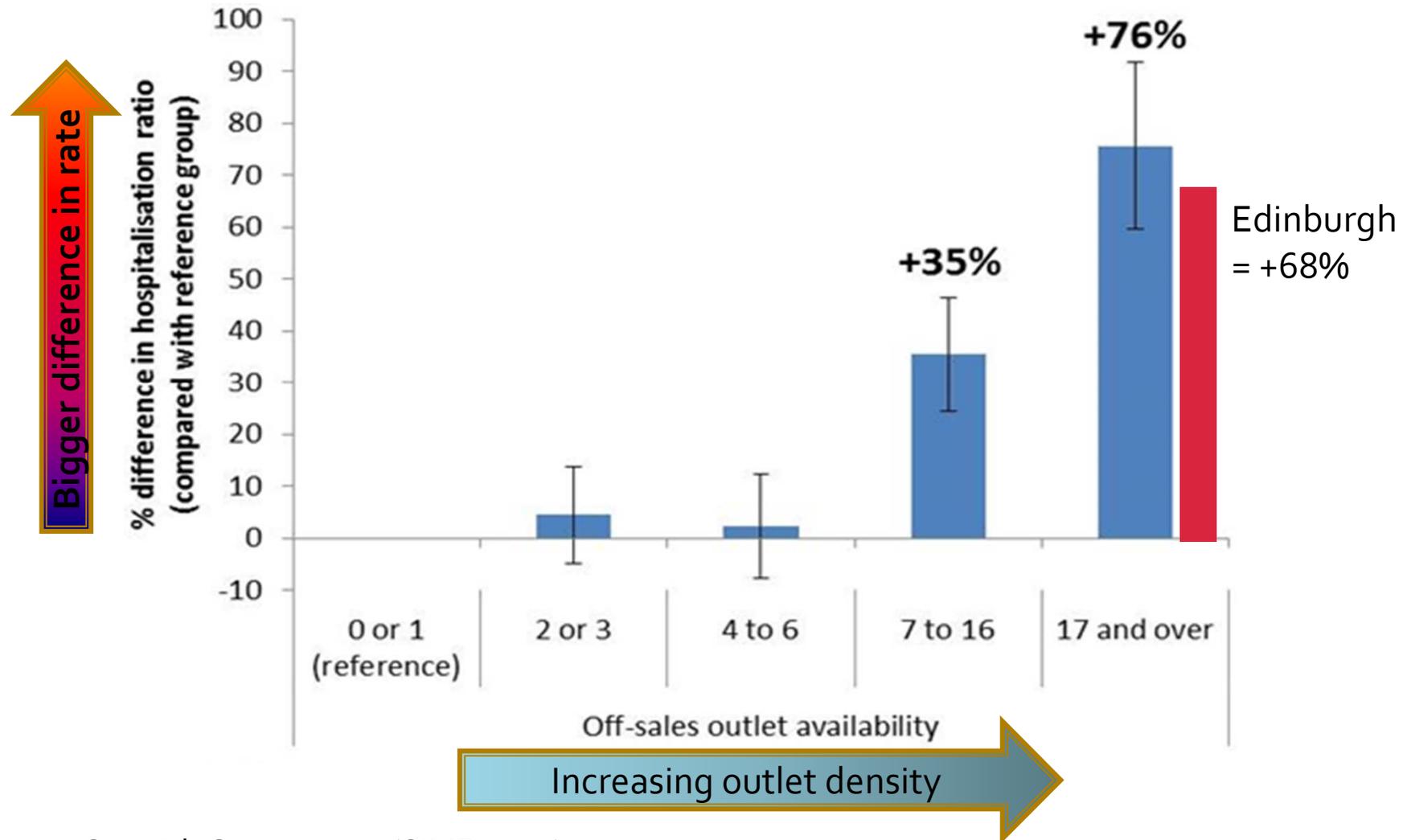
- Compared with residents of datazones with the **lowest** total outlet density, those in the **highest** density neighbourhoods had significantly higher risks of:
 - Exceeding government recommendations
 - Binge drinking
- Highest risk of exceeding recommendations found for the **lowest income individuals** living in highest outlet density neighbourhoods

Alcohol-related deaths



Source: General Register Office for Scotland (2002-2011)

Alcohol-related hospitalisations



Source: Scottish Government (SIMD 2012)

Discussion

- Key findings:
 - **Social gradient** in alcohol outlet distribution in Scotland
 - Relationship between outlet density and drinking = **strongest in the lowest income group**
 - *With all else being equal*, neighbourhoods with most alcohol outlets had:
 - **highest alcohol-related death rates**
 - **highest alcohol-related hospitalisation rates**
 - Strongest relationships for **off-sales**



Discussion

- **Alcohol environments:**
 - crucial for understanding drinking and alcohol-related health in Scotland
 - off-sales outlets may have greatest potential for harm
- **Policy approaches:**
 - focus on individual behavioural change unlikely to succeed
 - must also recognise environmental factors that constrain/enable drinking

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