

## Cardiovascular Disease (CVD) Modelling Project

Kirk Allen, Duncan Gillespie, Maria Guzman-Castillo, Rory McGill, Piotr Bandosz, Martin O’Flaherty, Peter Diggle, Simon Capewell

Liverpool and Lancaster Universities Collaboration for Public Health Research

**Background:** Poorer groups have higher CVD mortality and morbidity, largely due to modifiable risk factors

**Objective:** Evaluate policies to improve lifestyle and dietary risk factors for cardiovascular disease, especially focusing on which policies could reduce CVD inequalities

**Methods:** Epidemiological modelling of changes in risk factors due to policies linked to changes in CHD mortality. Analyses stratified by socioeconomic circumstance.

**SALT**

- ↓ Reformulation
- ↑ Labelling
- ↑ Health Promotion

Paper submitted

**TRANS FAT**

- ↓ Reformulation
- ↑ Labelling
- ↑ Restaurant Ban

Paper being drafted

**SMOKING**

- ↓ Higher Taxes
- ↔ Public Place Bans
- ↑ Public Info Campaigns
- ↔ Advertising Bans
- ↑ Health Warnings
- ? Plain Packaging
- ↔ Treatment

Developing model

↓ Should reduce inequalities  
 ↑ Might increase inequalities  
 ↔ Neutral

Groups with higher CVD burden should benefit more from reduction in risk factors. But, policies that fail to reach those at highest risk might widen inequalities.

### STRUCTURE vs AGENCY

### OTHER CONTRIBUTIONS

- Projecting future CHD mortality by social group (paper submitted)
- Estimating role of statins in reducing cholesterol inequalities (paper submitted)