

Policy needs and lessons from Scotland

SDRN Workshop Presentation

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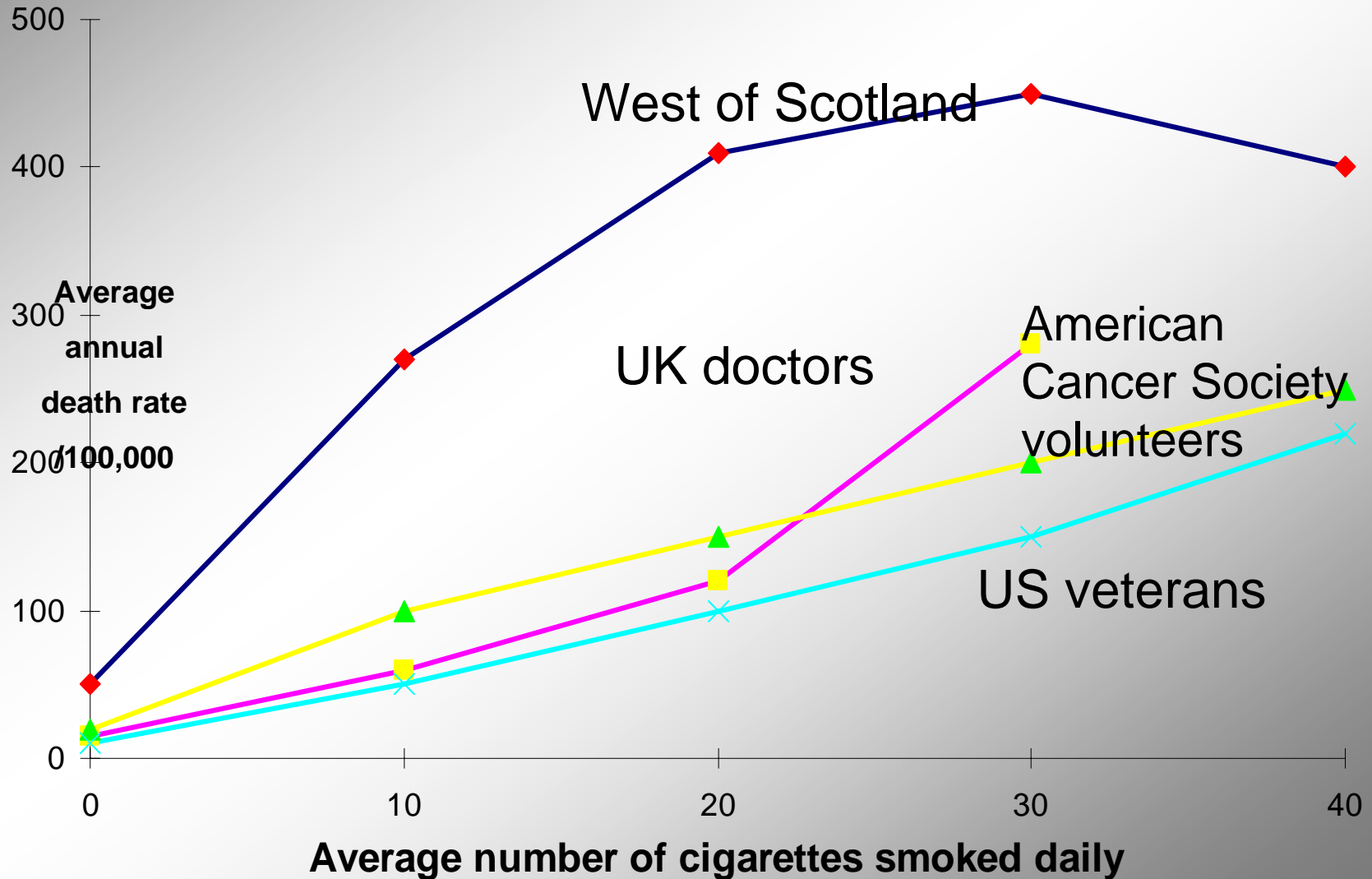
Acknowledgements

Why do we need fresh thinking on
environment and health?

Glasgow slums in 1990



Comparison of lung cancer mortality in West of Scotland and 3 major cohorts



A Philosophical Context

.....how is health created and destroyed?

Eras in Epidemiology

ERA**	PARADIGM	ACTION	STATUS
Era of Sanitary Statistics (early 19th century)	MIASMA: poisoning by foul odours	Improve Sanitation	Superceded
Era of Infectious Disease (late 19th century - 2nd world war)	GERM THEORY: single agents relate one to one with specific diseases	Sanitation Isolation Vaccination Antibiotics	Current
Era of Chronic Disease	BLACK BOX: exposure related to outcome without necessity for intervening factors	Control risk factors: Behavioural and environmental	Current

** after Susser & Susser

Eras in Epidemiology

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Era of Ecological Public Health	IT ALL MATTERS: complex interaction of social, behavioural and physical factors	<ol style="list-style-type: none"> 1. Understand Mechanisms 2. Recognise Convergence 3. Identify Synergy and Antagonism 4. <u>Embrace Complexity</u> 	

Has there ever been a greater mismatch between paradigm policy and action?

A 21st Century Scottish Environmental Health agenda

An Environment Not only -

- Free from **physical**, toxic, infectious and allergic hazard

But also-

- Nurturing of positive health, wellbeing and resilience
- Consistent with and promoting of healthy behaviour
- Consistent with the development and maintenance of social capital
- Consistent with greater equity in health

and none of this will be delivered by 'compartmentalising' issues in environmental health or indeed across the wider spectrum of public health.....

In this context the traditional approach appears:

- Hazard Based
- Compartmentalised
- Narrow

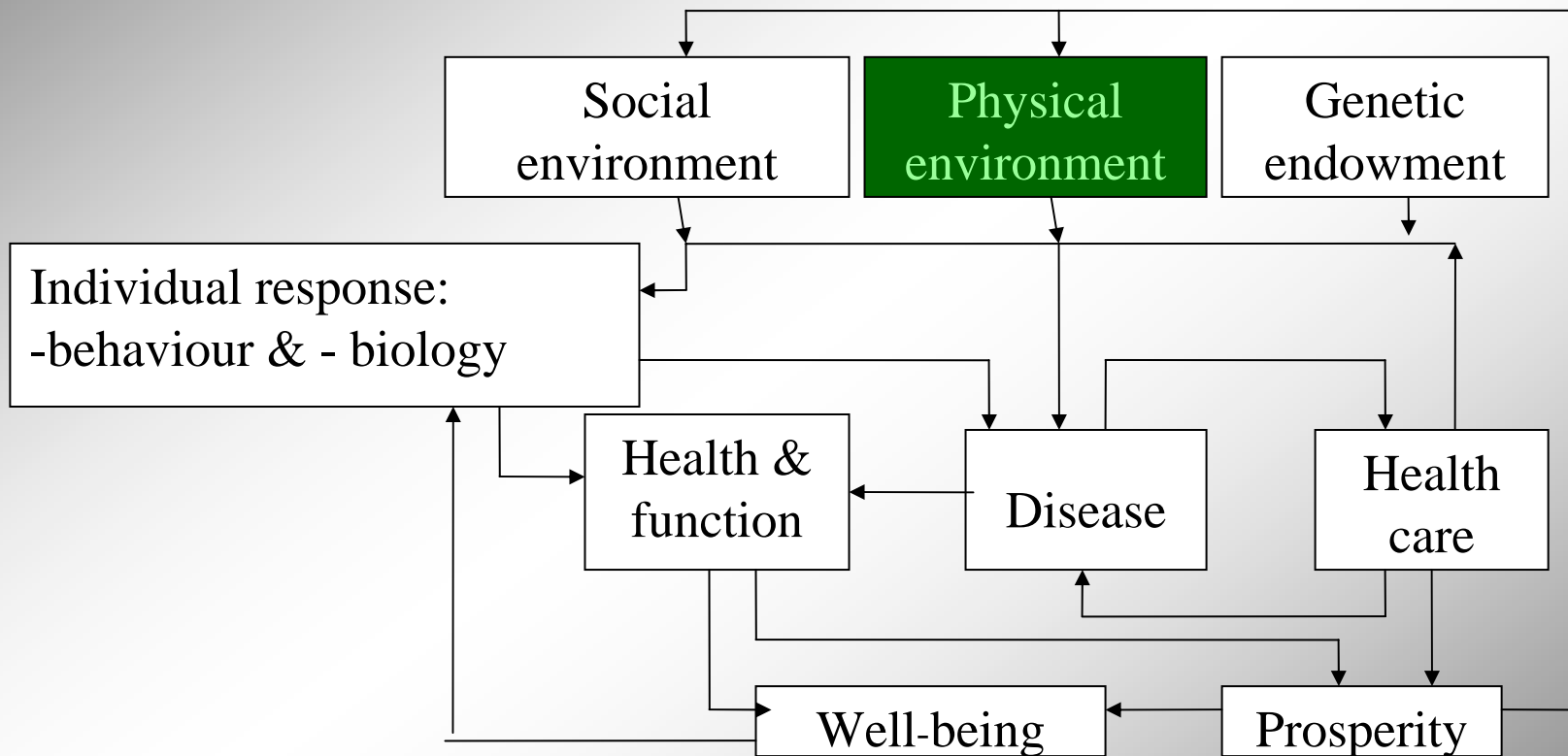
Yet hitherto undeniably powerful and effective!

How do we turn things around?

Part 1

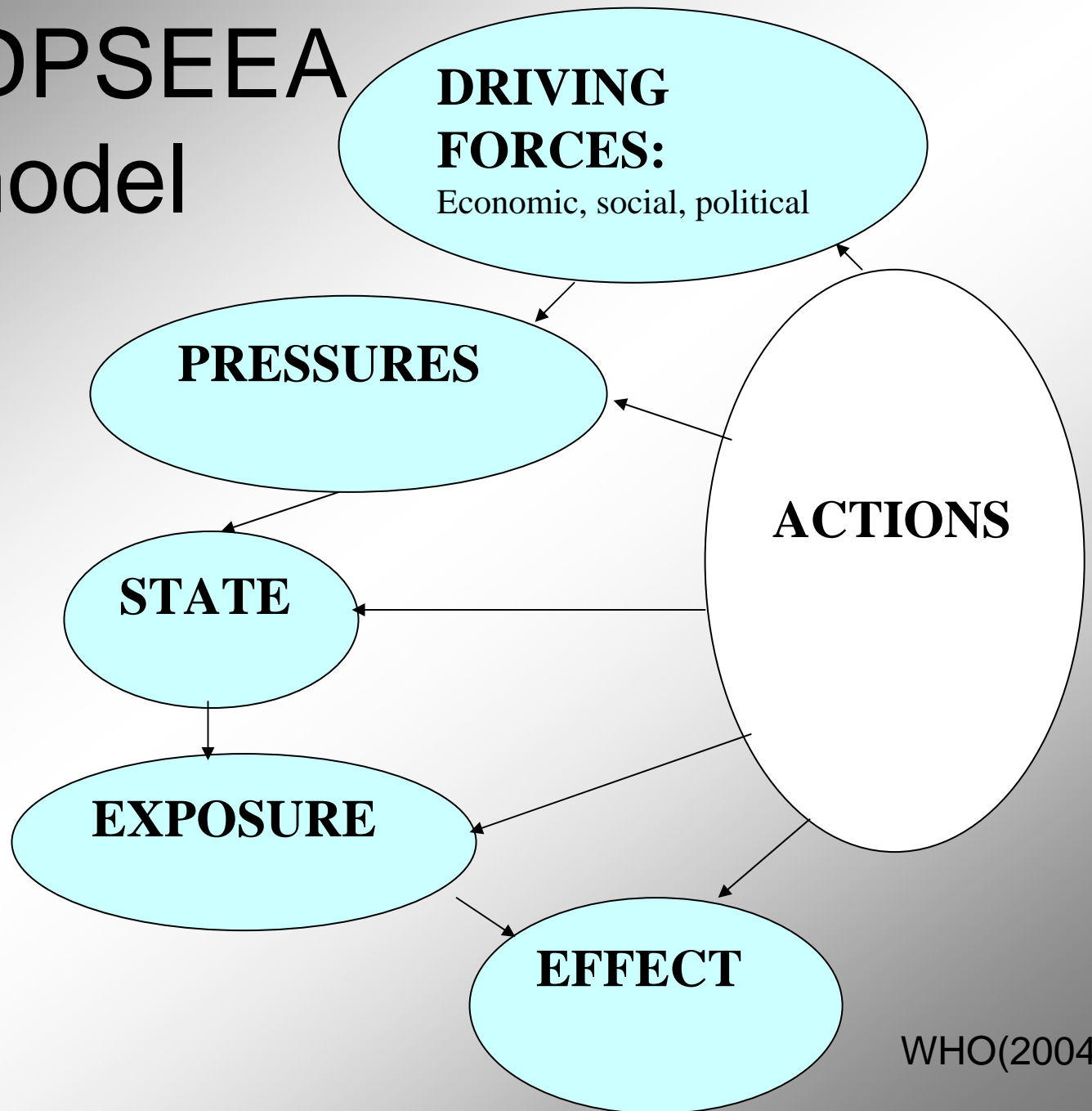
“Framing the Problem”

Socio-ecological model of health



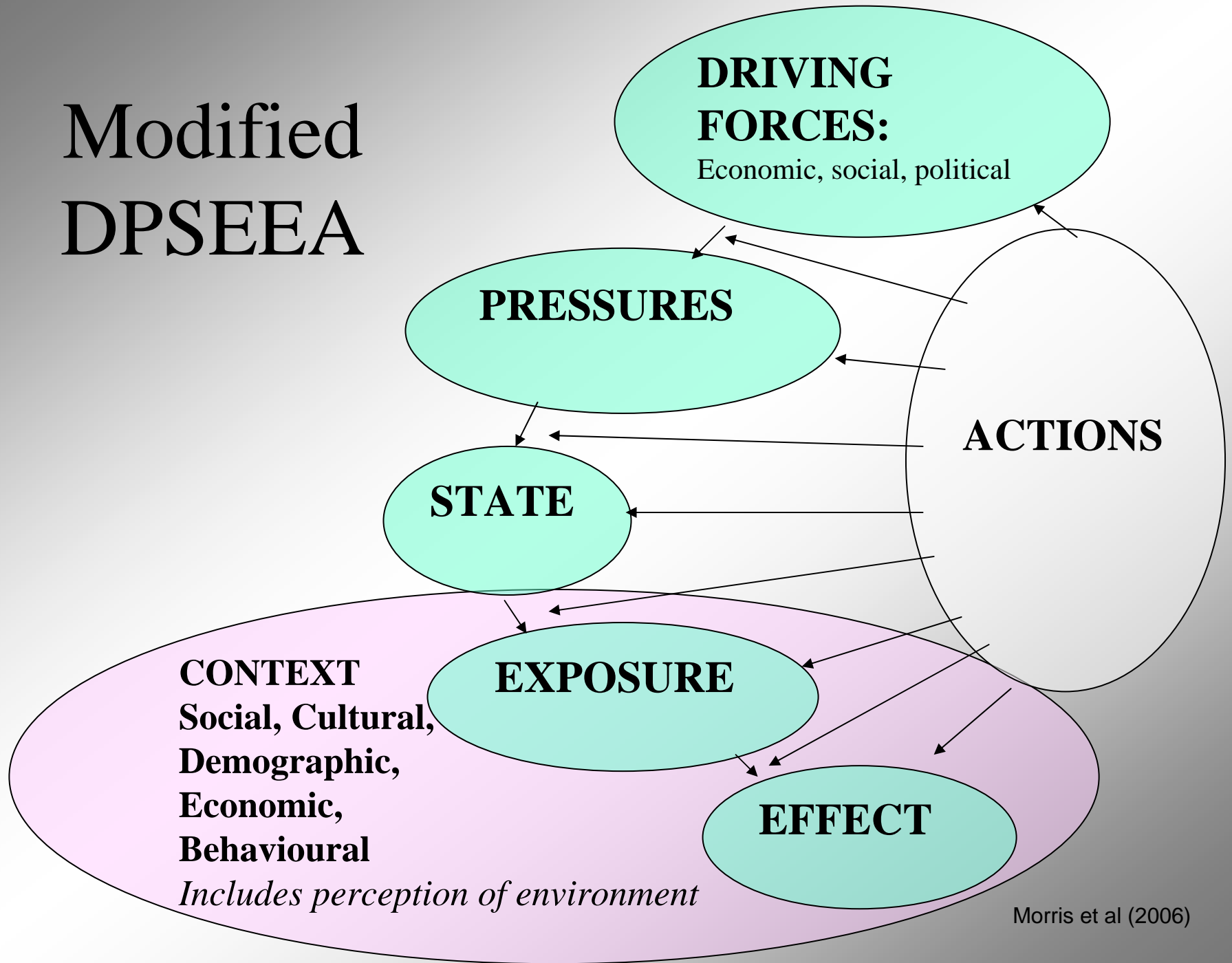
Evans and Stoddart (1994)

The DPSEEA model



WHO(2004)

Modified DPSEEA



Part 2

“Organising to Deliver”

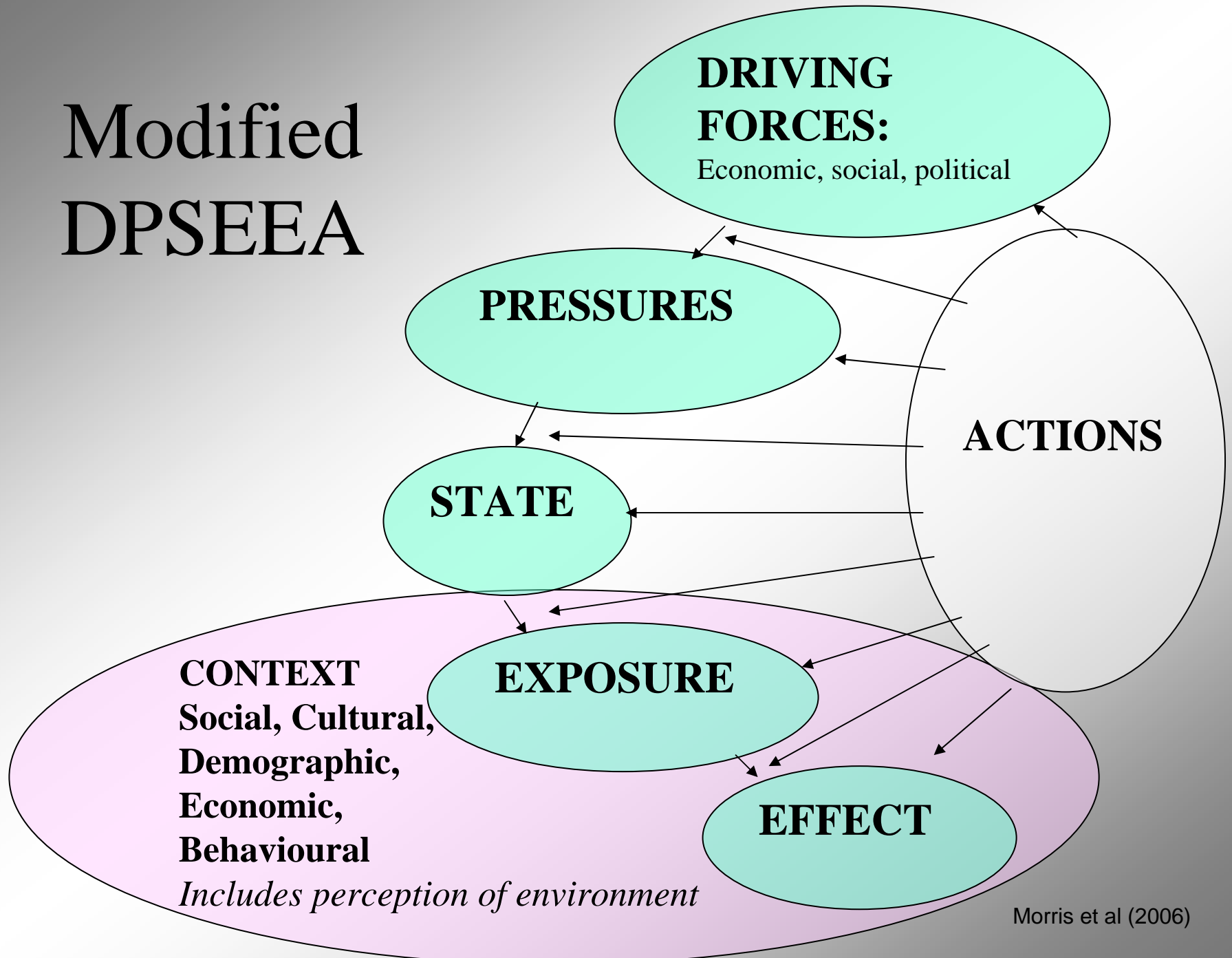
The Goal of Strategy in Scotland

To develop and integrate systems to pursue a physical environment consistent with and promoting of human health broadly defined and with a society of equal opportunity

The three cornerstones of strategy

- Intelligence System
- Evaluation System
- “Levers of Change” System

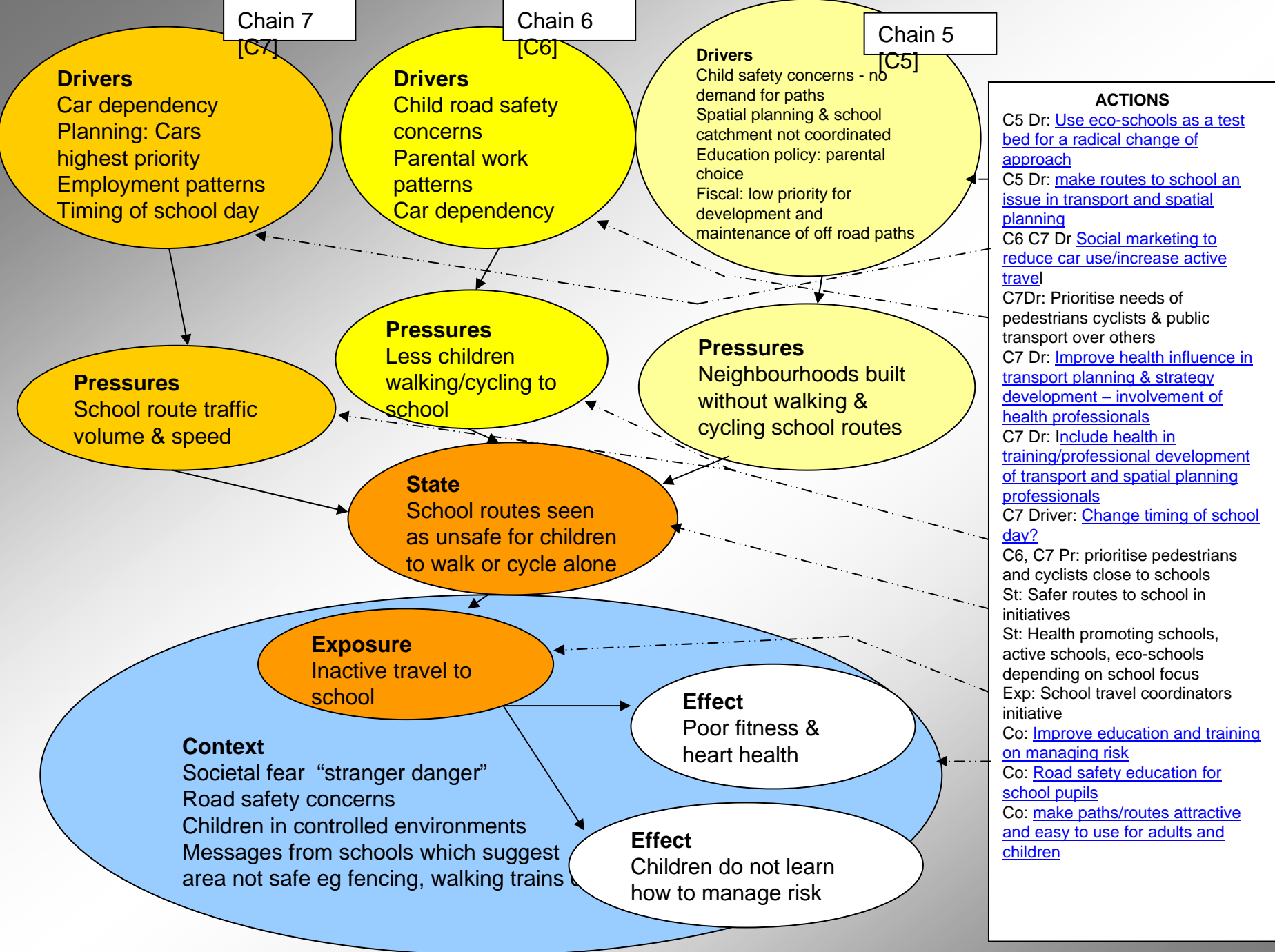
Modified DPSEEA

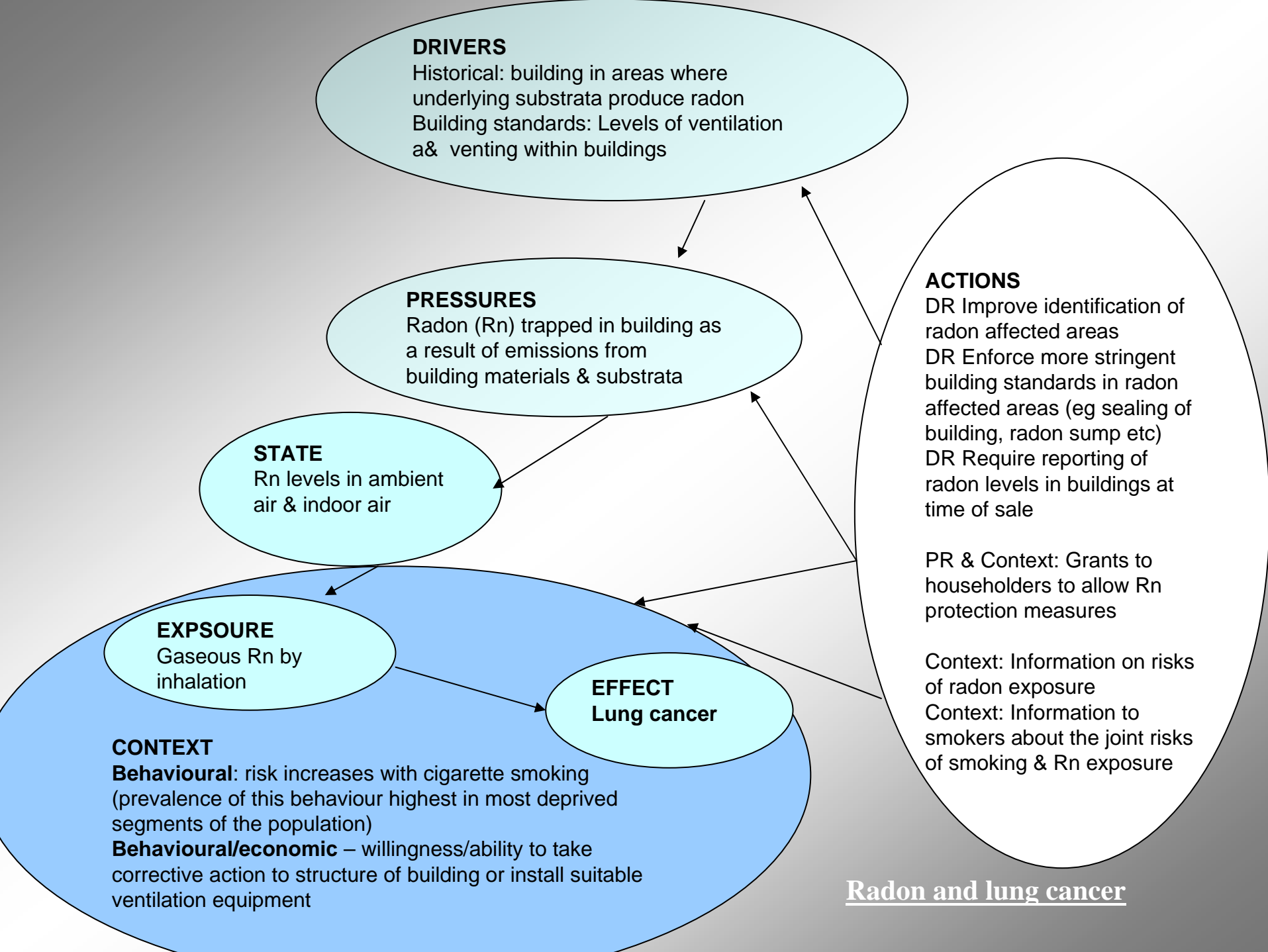


Turning things around - Part 3

“Building Stakeholder Consensus”

Stakeholder Workshops to Map the Territory





CHAIN 2 (C2)**CHAIN 1 (C1)****DRIVERS**

Tobacco marketing, availability, addictiveness
 Economic: corporate resources.
 Fiscal revenue of taxation
 Social: acceptability, peer pressure to take up smoking, "right of passage" in the young
 Housing policy: geographical concentration of social housing – high prevalence of smoking

DRIVERS

Fuel policy: use of fossil fuels in homes
 Economic: Failure to maintain combustion sources
 Building standards: Venting and ventilation standards
 Commercial: product and servicing standards
 Cultural/social: inappropriate use of sold fuel sources indoors

PRESSURES

Emissions of CO from burning tobacco products

PRESSURES

Emissions of CO from incomplete combustion in low oxygen concentrations

STATE

CO levels in indoor air

EXPSOURE

Gaseous CO by inhalation

CONTEXT

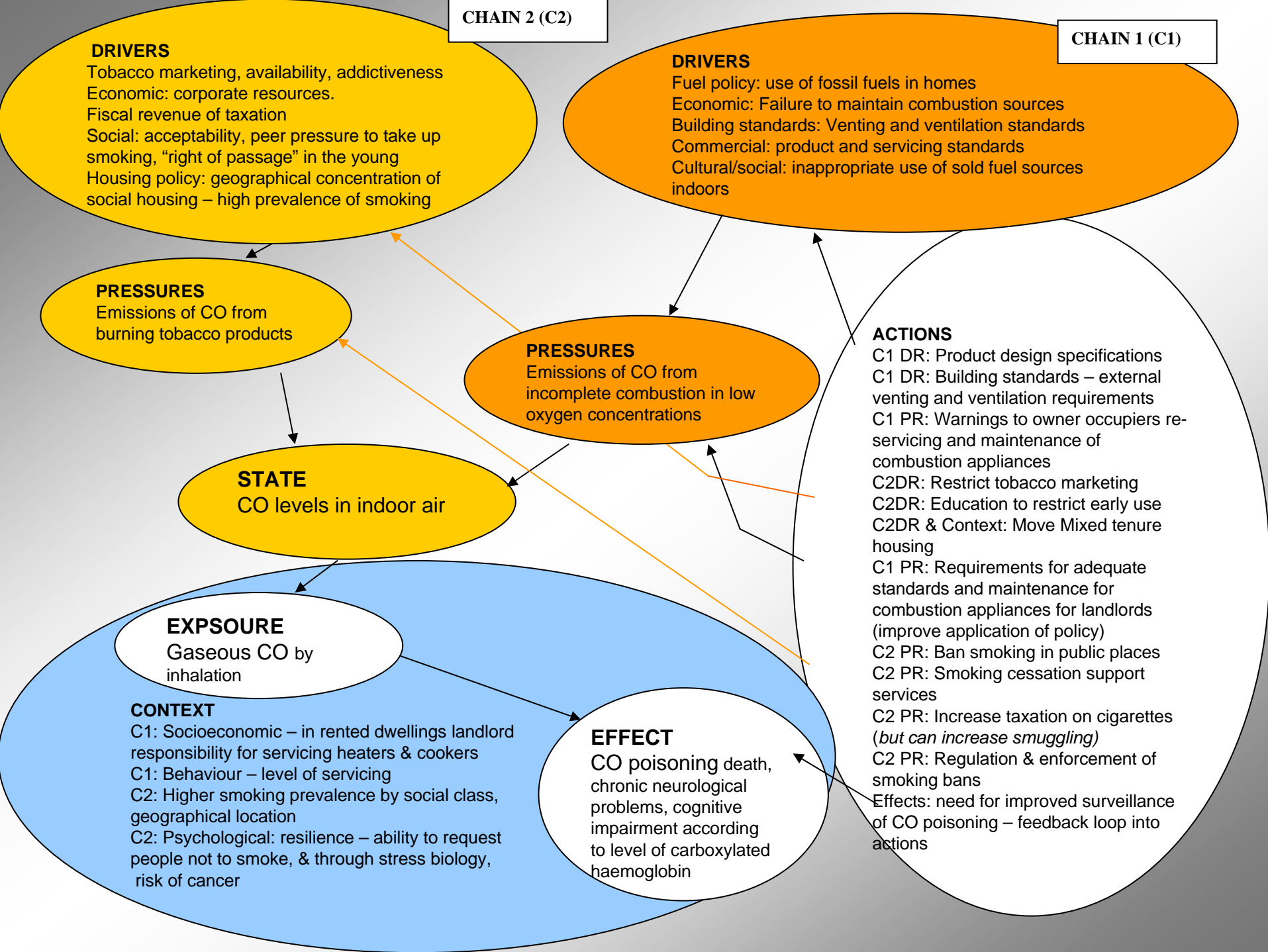
C1: Socioeconomic – in rented dwellings landlord responsibility for servicing heaters & cookers
 C1: Behaviour – level of servicing
 C2: Higher smoking prevalence by social class, geographical location
 C2: Psychological: resilience – ability to request people not to smoke, & through stress biology, risk of cancer

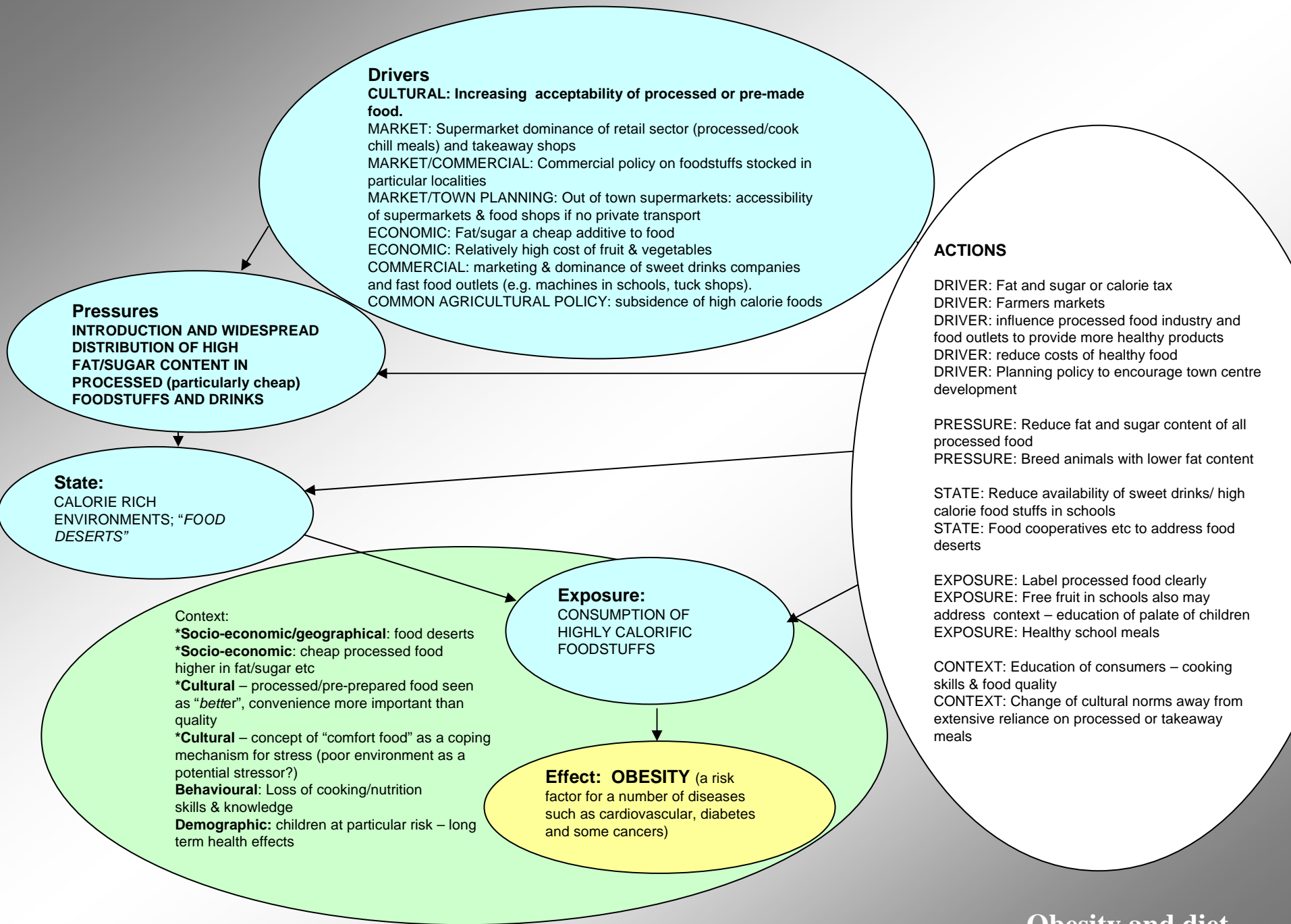
EFFECT

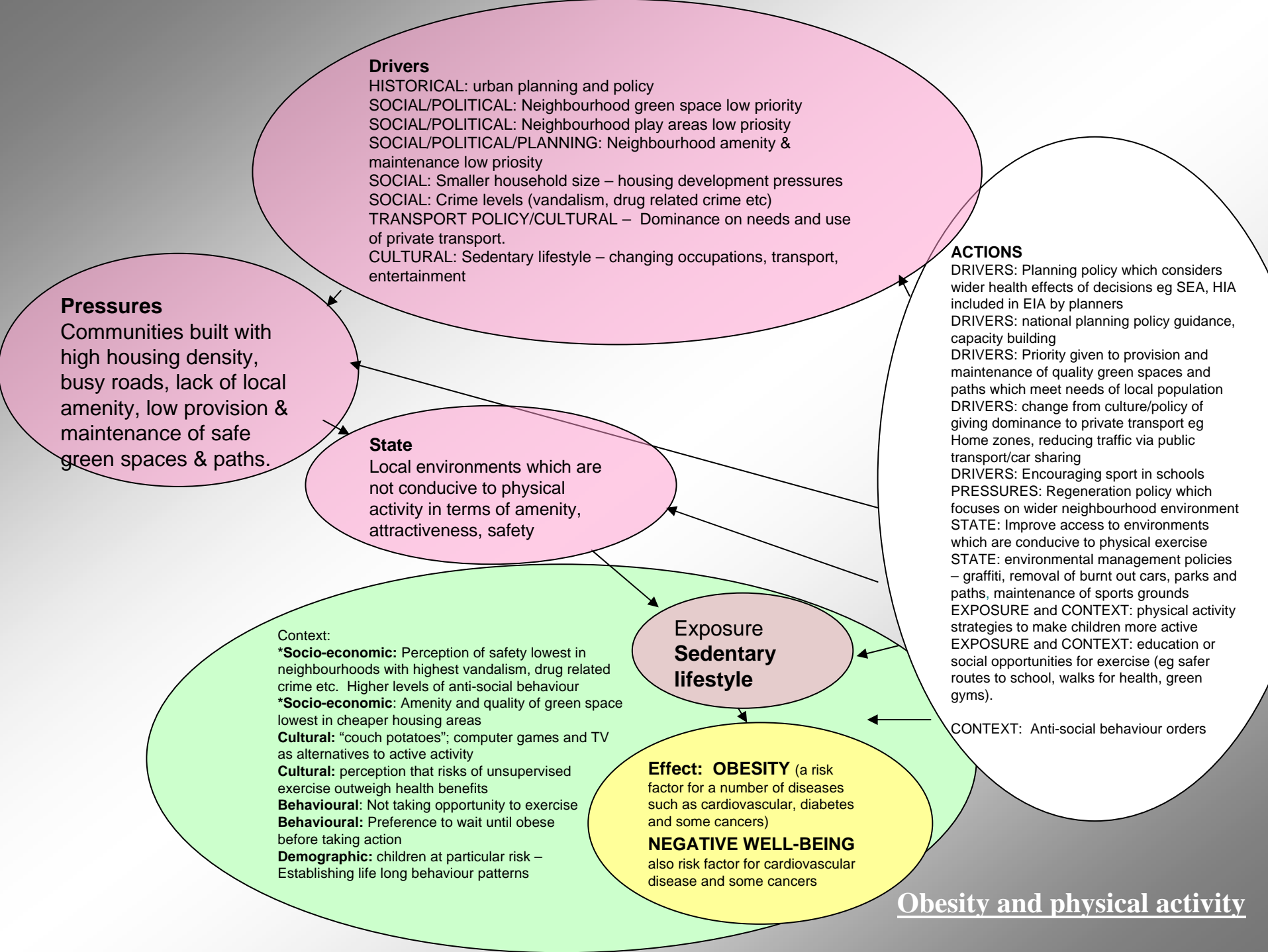
CO poisoning death, chronic neurological problems, cognitive impairment according to level of carboxylated haemoglobin

ACTIONS

C1 DR: Product design specifications
 C1 DR: Building standards – external venting and ventilation requirements
 C1 PR: Warnings to owner occupiers re-servicing and maintenance of combustion appliances
 C2DR: Restrict tobacco marketing
 C2DR: Education to restrict early use
 C2DR & Context: Move Mixed tenure housing
 C1 PR: Requirements for adequate standards and maintenance for combustion appliances for landlords (improve application of policy)
 C2 PR: Ban smoking in public places
 C2 PR: Smoking cessation support services
 C2 PR: Increase taxation on cigarettes (*but can increase smuggling*)
 C2 PR: Regulation & enforcement of smoking bans
 Effects: need for improved surveillance of CO poisoning – feedback loop into actions







Drivers

HISTORICAL: urban planning and policy
 SOCIAL/POLITICAL: Neighbourhood green space low priority
 SOCIAL/POLITICAL: Neighbourhood play areas low priority
 SOCIAL/POLITICAL/PLANNING: Neighbourhood amenity & maintenance low priority
 SOCIAL: Smaller household size – housing development pressures
 SOCIAL: Crime levels (vandalism, drug related crime etc)
 TRANSPORT POLICY/CULTURAL – Dominance on needs and use of private transport.
 CULTURAL: Sedentary lifestyle – changing occupations, transport, entertainment

Pressures

Communities built with high housing density, busy roads, lack of local amenity, low provision & maintenance of safe green spaces & paths.

State

Local environments which are not conducive to physical activity in terms of amenity, attractiveness, safety

**Exposure
Sedentary
lifestyle**

Effect: OBESITY (a risk factor for a number of diseases such as cardiovascular, diabetes and some cancers)

NEGATIVE WELL-BEING
 also risk factor for cardiovascular disease and some cancers

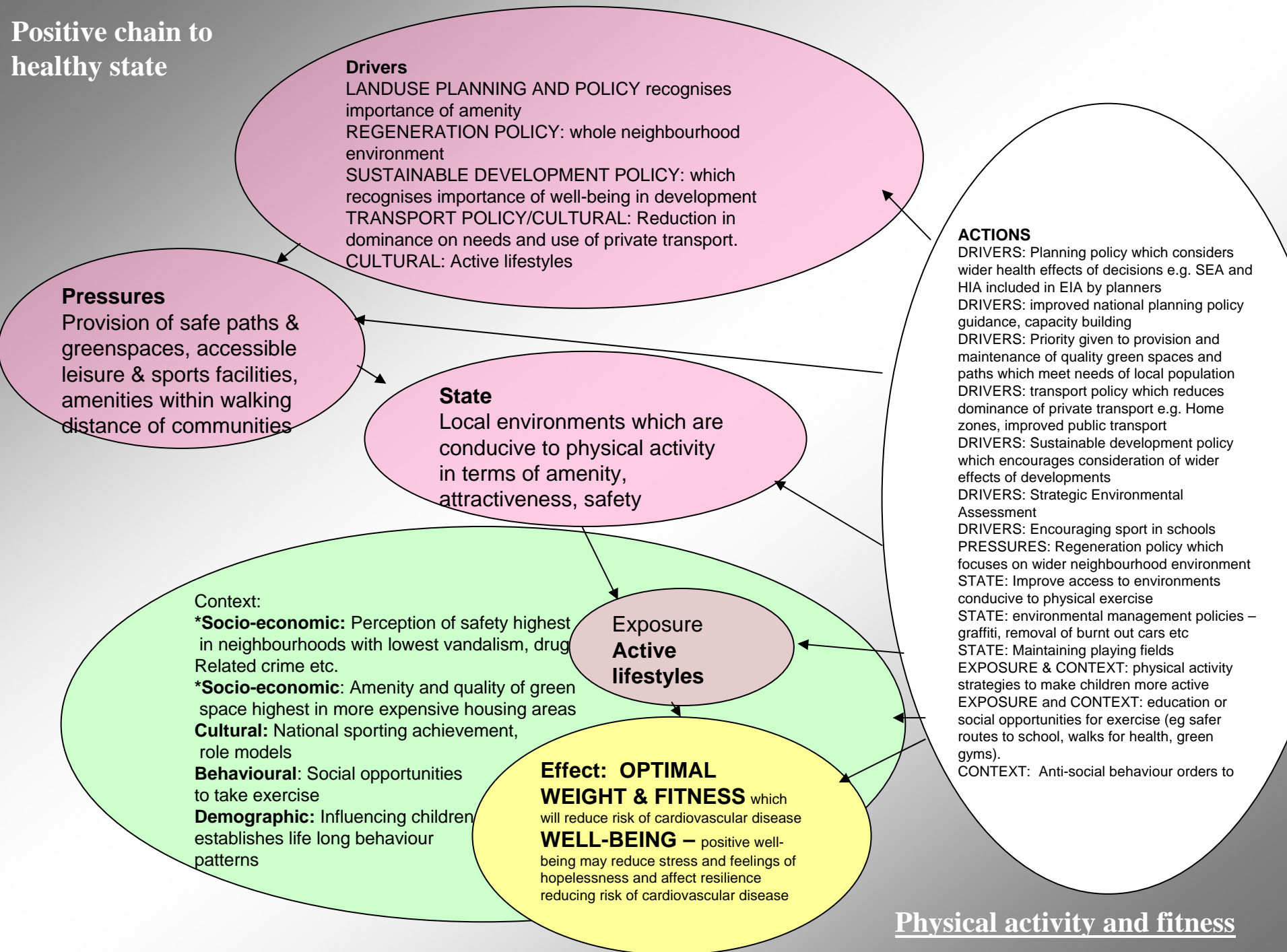
ACTIONS

DRIVERS: Planning policy which considers wider health effects of decisions eg SEA, HIA included in EIA by planners
 DRIVERS: national planning policy guidance, capacity building
 DRIVERS: Priority given to provision and maintenance of quality green spaces and paths which meet needs of local population
 DRIVERS: change from culture/policy of giving dominance to private transport eg Home zones, reducing traffic via public transport/car sharing
 DRIVERS: Encouraging sport in schools
 PRESSURES: Regeneration policy which focuses on wider neighbourhood environment
 STATE: Improve access to environments which are conducive to physical exercise
 STATE: environmental management policies – graffiti, removal of burnt out cars, parks and paths, maintenance of sports grounds
 EXPOSURE and CONTEXT: physical activity strategies to make children more active
 EXPOSURE and CONTEXT: education or social opportunities for exercise (eg safer routes to school, walks for health, green gyms).

CONTEXT: Anti-social behaviour orders

Context:
 ***Socio-economic**: Perception of safety lowest in neighbourhoods with highest vandalism, drug related crime etc. Higher levels of anti-social behaviour
 ***Socio-economic**: Amenity and quality of green space lowest in cheaper housing areas
Cultural: "couch potatoes"; computer games and TV as alternatives to active activity
Cultural: perception that risks of unsupervised exercise outweigh health benefits
Behavioural: Not taking opportunity to exercise
Behavioural: Preference to wait until obese before taking action
Demographic: children at particular risk – Establishing life long behaviour patterns

Positive chain to healthy state



What's Happening at the Moment

Prototype

Children, Environment and Health

- What are the key environmental influences on child health outcomes?
- How can Sustainable Places ensure positive child health outcomes?



What do we expect prototype demonstrate?

- * Cross cutting work across 5 strategic outcomes
- * The value of strategic environmental health
- * Live links between research, data, delivery and central policy making
- * A meaningful response to CEHAPE
- * A Health Improvement dimension to EH



What can the Strategic Framework Deliver? Can it Impact Positively on the Themes?

Themes of Government	Better, more equal health	Better health through better places	
Wealthier and Fairer			
Healthier			
Safer and Stronger			
Smarter			
Greener			

Failure to deal embrace complexity
carries a cost for Scotland

If we continue to do more of the same we are very likely to get more of the same!