Health and Social Impacts of Climate Change – PHC

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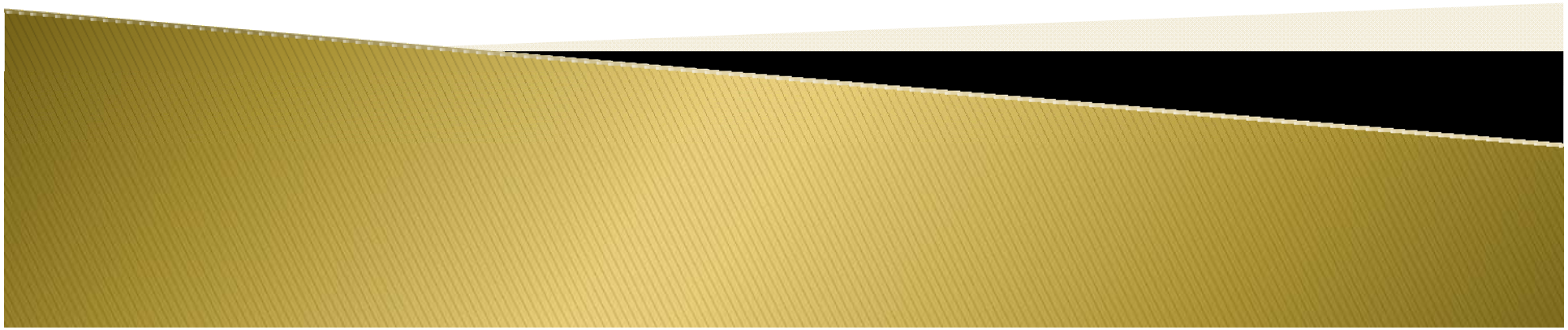


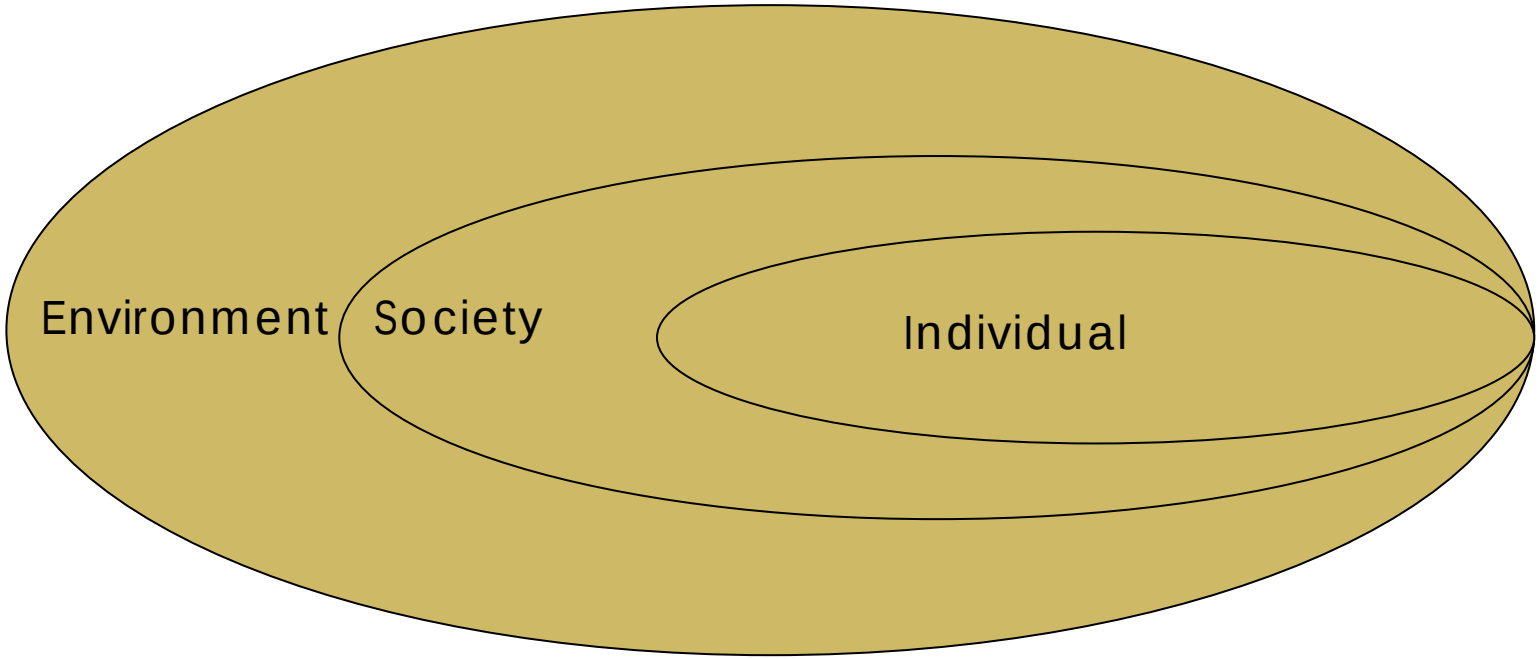
Climate Change and Primary Health Care

- Primary Health Care:
  - is community based
  - promotes, protects and develops health
  - in a defined community (DHS 2009:16)

- Service values in Declaration of Alma Ata.
  - Address physical, social and mental wellbeing
  - Put people at the centre of health care
  - Promote health
  - Value social justice, community participation and social inclusion

Social Model of Health/Domains of ecological integrity

The levels are interdependent



Local impacts of climate change

Port Phillip and Westernport region the likely impacts of climate change are:

Rising temperatures. Average temperatures have already increased 0.4C above pre-1990 averages and this is likely to at least double by 2030. By 2070 Melbourne's average temperatures are likely to be similar to those currently found in Echuca. There will be more hot days and more extreme fire danger days.

Declining rainfall. Rainfall has already decreased by 14% below pre-1990 averages. By 2070 Melbourne's rainfall is likely to be similar to that of present day Seymour. Less rainfall and drier soils will lead to changes in agricultural practices and production.

The weather will become more variable with more heavy rain, more dry spells, and more storms.

Sea levels will rise producing coastal flooding enhanced by more major storm events (Department of Sustainability and Environment 2008).

Australian perceptions of climate change – 2010

- 71% said level of concern about CC had increased over last 2 years
- 78% said that if nothing is done CC will have very serious or somewhat serious consequences
- 45% consider CC a serious problem now
- Knowledge of the science of CC poor
- The most common perception of CC consequences are natural disasters and extreme weather events
- 37% reported personal experience of natural disasters
- 59% thought their locality vulnerable

Risk perception

- We may perceive risk:
  - Through feelings – fast, intuitive, instinctive reaction to danger
  - Through analysis – logic, reason, knowledge of evidence assessment of danger

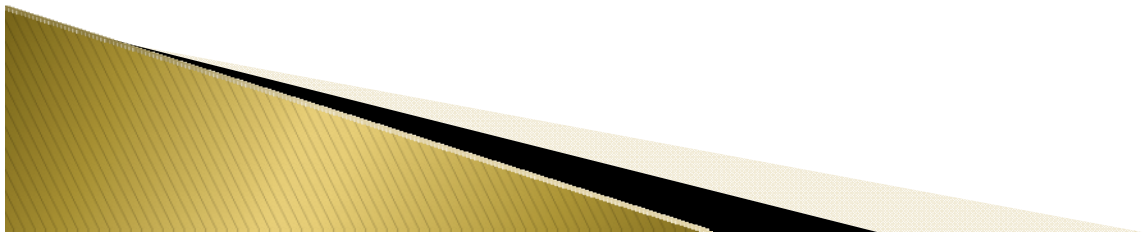
- The risk apprehension continuum:

  - Feelings ……X……. Analysis

  - The best spot is in the middle

Drivers of change

- Climate change itself – eg changes in temperature, rainfall, vegetation and habitat
- Climate change adaptation/mitigation strategies – eg carbon pricing(Chapman & Boston 2007)



Health Effects of Climate Change

(Horton et al 2008:10)

- *Health impacts of extreme weather events (floods, storms, cyclones, bushfires etc)*
- *Health impacts of temperature extremes, including heat waves*
- *Vector-borne infectious diseases (e.g. mosquito-borne dengue fever, Ross River virus*
- *Food borne infectious diseases (including from Salmonella, Campylobacter and many other microbes)*
- *Water-borne infectious diseases and risks from poor water quality*
- *Diminished food production: yields, costs/affordability, nutritional consequences*
- *Increases in urban air pollution (e.g. ozone)*
- *Increased production of aeroallergens (spores, pollens)*
- ***Mental health consequences of social, economic and demographic dislocations***
- *Emotional stresses and mental health problems in children, in response to perceptions/fears of climate change and to family stresses*

Variability in health impacts

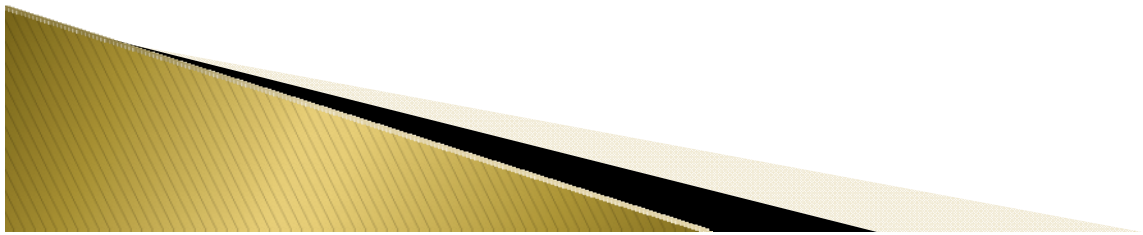
- Health impacts will vary across ‘regions, communities and demographic subgroups’ reflecting
  - Differences in location (geographic)
  - Socio Economic Status
  - Preparedness
  - Infrastructure
  - Institutional resources
  - Local adaptive strategies

  (Garnaut 2008:139)

Disadvantaged Groups

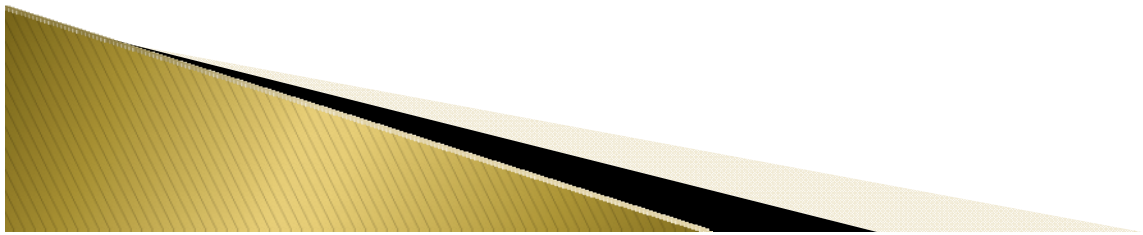
People impacted most will be:

- People who are old or sick
- On low incomes
- In outer suburbs
- In rental housing
- People in poor quality housing (Garnaut 2008:139)
- Speak a language other than English at home
- Children (UNICEF)
- Indigenous Australians



Definitions

- ***Mitigation*** – reduction in the source of, enhancement of sinks for, greenhouse gases (adapted from Garnaut 2008:612)
- ***Adaptation*** – adjustment of natural or human systems to moderate harm or exploit opportunities (adapted from Garnaut 2008:608)
- ***Coping*** – short term responses to situations that are threatening (adapted from Berkes & jolly 2001:2)



A climate change story line – Natural disaster – flood

Chain of effects	Potential responses
Heavy rain and flooding of an urban area	
Vulnerable groups: •People living in low lying areas •People without communication	•Assessment of risk •Activation of response plans
Effects on individuals: •Injury •Shortage of food and water •Stress •Loss of property	•Medical/nursing services •Coordination of supplies •Community peer support •Material aid
Effects on community: •Economic disruption •Damage to infrastructure •Social stress	•Emergency relief payments •Repair based on need •Community organisation

Key ideas

- Social model of health
- Variability in health impacts across populations and localities
- Multiple scales of intervention – individual, household, community, region, etc.
- Multiple social responses to climate change – mitigation, adaptation and coping
- Joined-up change strategies