



# “Heat Waves: whose problem are they?”

From sharing responsibility to accepting accountability.

Iain S Mackenzie  
Inspector-General Emergency Management  
Queensland

**Session V - Keynotes speeches on Key Challenges for Disaster and Emergency Management in the Health Care Sector**  
**“Disaster and Emergency Management in the Health Care Sector”**

**23 February 2016**

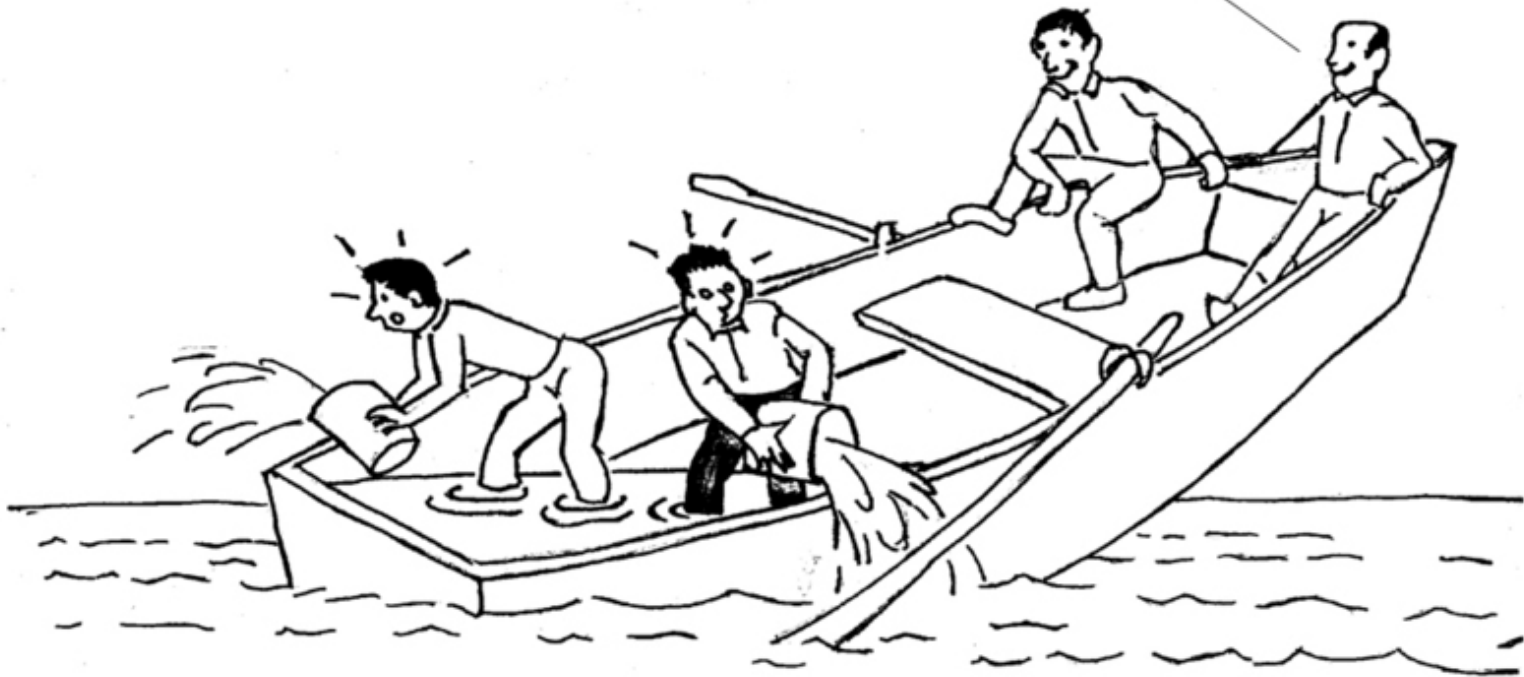
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Inspector-General Emergency Management



# Shared Responsibility

Sure glad the hole isn't at our end.



# Heat is Australia's number one natural killer

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BY SARA PHILLIPS

ABC Environment | 4 SEP 2014

 Comments

**Heatwaves have killed more Australians than all other natural hazards combined. It's a situation that has the community sector calling for action.**



**TABLE 2: NATURAL HAZARD FATALITIES  
IN AUSTRALIA, 1900-2011\***

NATURAL HAZARD	DEATHS 1900-2011	% TOTAL NATURAL HAZARD DEATHS 1900-2011
Extreme heat	4,555	55.2
Flood	1,221	14.8
Tropical cyclone	1,285	15.6
Bush/grassfire	866	10.5
Lightning	85	1
Landslide	88	1.1
Wind storm	68	0.8
Tornado	42	0.5
Hail storm	16	0.2
Earthquake	16	0.2
Rain storm	14	0.2

\*Data source: Coates et al., 2014



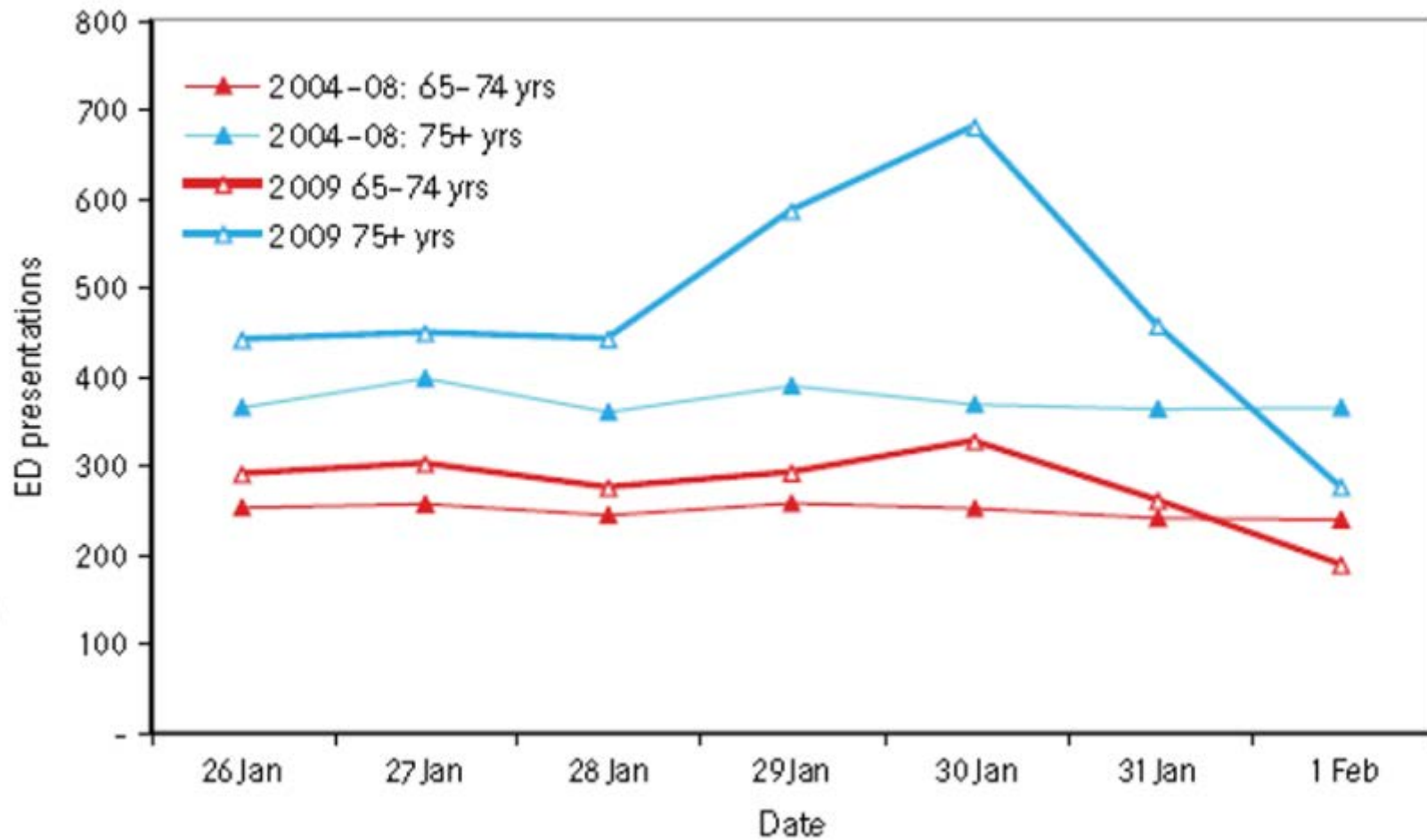
# Sydney set for sizzling end to summer as temps to reach 40c in west

🕒 February 22, 2016 12:38pm

📄 The Daily Telegraph



Figure 6. Emergency department presentations by age group: mean of 2004-2008 vs 2009



# Queensland

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## Hospital admissions rise as south-east Queensland swelters in the heat

February 2, 2016 - 7:08AM

136 reading now

Comments 1





## Figure 1B

### Impact on public health and services – 2009 and 2014 heatwaves

Nature of impact	2009 (26 January to 1 February)	2014 (12-18 January)
	Excess deaths <sup>(a)</sup>	374
Heat-related emergency department presentations	714	621
After Hours doctor consultations	1 955	3 687
Ambulance dispatches (metropolitan Melbourne)	7 035	8 359

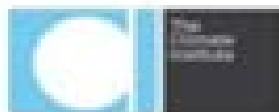
(a) Excess deaths are the number of deaths over what would normally be expected for the same period.

Source: Victorian Auditor-General's Office, using Department of Health information.

# The 2009 heatwave in Victoria

## Infrastructure impacts of 2009 heatwave in Melbourne

Sector	Sub-sector	Impact level	Description	Trigger point and thresholds
Energy	Electricity	High	<ul style="list-style-type: none"> <li>Record demand</li> <li>Compromised supply</li> <li>Reduced transmission efficiency and faults</li> </ul>	<ul style="list-style-type: none"> <li>Full operation &amp; distribution capacity</li> <li>Heat lowers performance</li> </ul>
	Gas	Min	Resilient	No reported sensitivities
	Generator	Min	<ul style="list-style-type: none"> <li>Impaired cooling for thermal stations</li> <li>Reduced coal production on high risk days</li> </ul>	<ul style="list-style-type: none"> <li>Limits on available water for cooling</li> <li>Risk of bushfire</li> </ul>
Transport	Train	High	<ul style="list-style-type: none"> <li>29 points of buckling lines</li> <li>Air con failure</li> </ul>	Signal equipment susceptible to heat
	Trams	Mod	Some trams failed	Engines sensitive to heat
	Buses	Min	Busses served as backup to train cancellations	Air conditioners struggle above 35 degrees



*Hamid's Roberts*



## Auditor-General says Victoria's heatwave plan inadequate

October 14, 2014



- Governance arrangements are not clear
- Quality of planning for heatwaves is variable
- Public health messages are not always well targeted
- Heatwave plans activation is not well understood

# Queensland's heatwave sees concerns for western rail lines as temperatures soar

ROSE BRENNAN THE COURIER-MAIL JANUARY 14, 2013 12:00AM

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1 COMMENTS



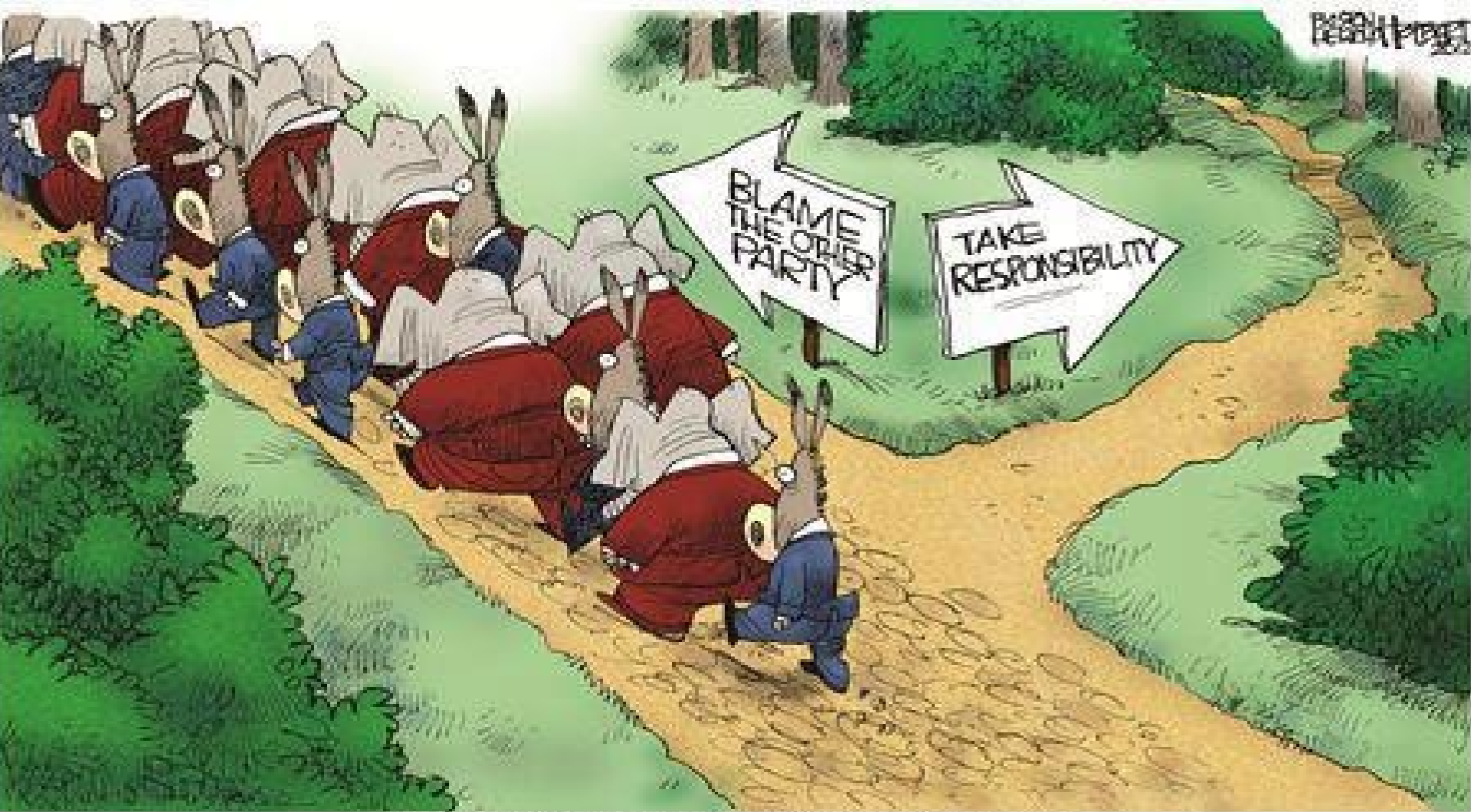
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PERSONAL PROTECT

# THE ROAD FAR LESS TRAVELED



# The Next Royal Commission:



- Insufficient regard to hazard and likely risk faced
- Planning process was inadequate & plans were not sufficiently communicated and tested
- Significant examples of poor communication
- Confused command and control arrangements
- Insufficient training to critical staff
- Need for more cooperation and collaboration
- Lack of accurate, timely and relevant information available
- Poor capability to exchange vital information
- Insufficient public information and warnings
- Recovery was not well planned or documented

# IGEM Reviews conducted 2014-15

Review of cyclone and storm tide sheltering arrangements



Review of state agency integration at a local and district level

Review of local governments' emergency warning capability



# IGEM Reviews conducted 2014-15

## – common themes across IGEM reviews

- Integrated risk-based planning approach applied to all levels of the arrangements
- Clarification of roles and responsibilities
- Use of a common language (or consistent disaster management terminology)
- Improved community profiling required to plan for needs of the vulnerable
- Need for improved warnings







Public Health  
England

**NHS**  
*England*

Protecting and improving the nation's health

# Heatwave plan for England

**Making the case:**  
the impact of heat on health –  
now and in the future

# Perceptions

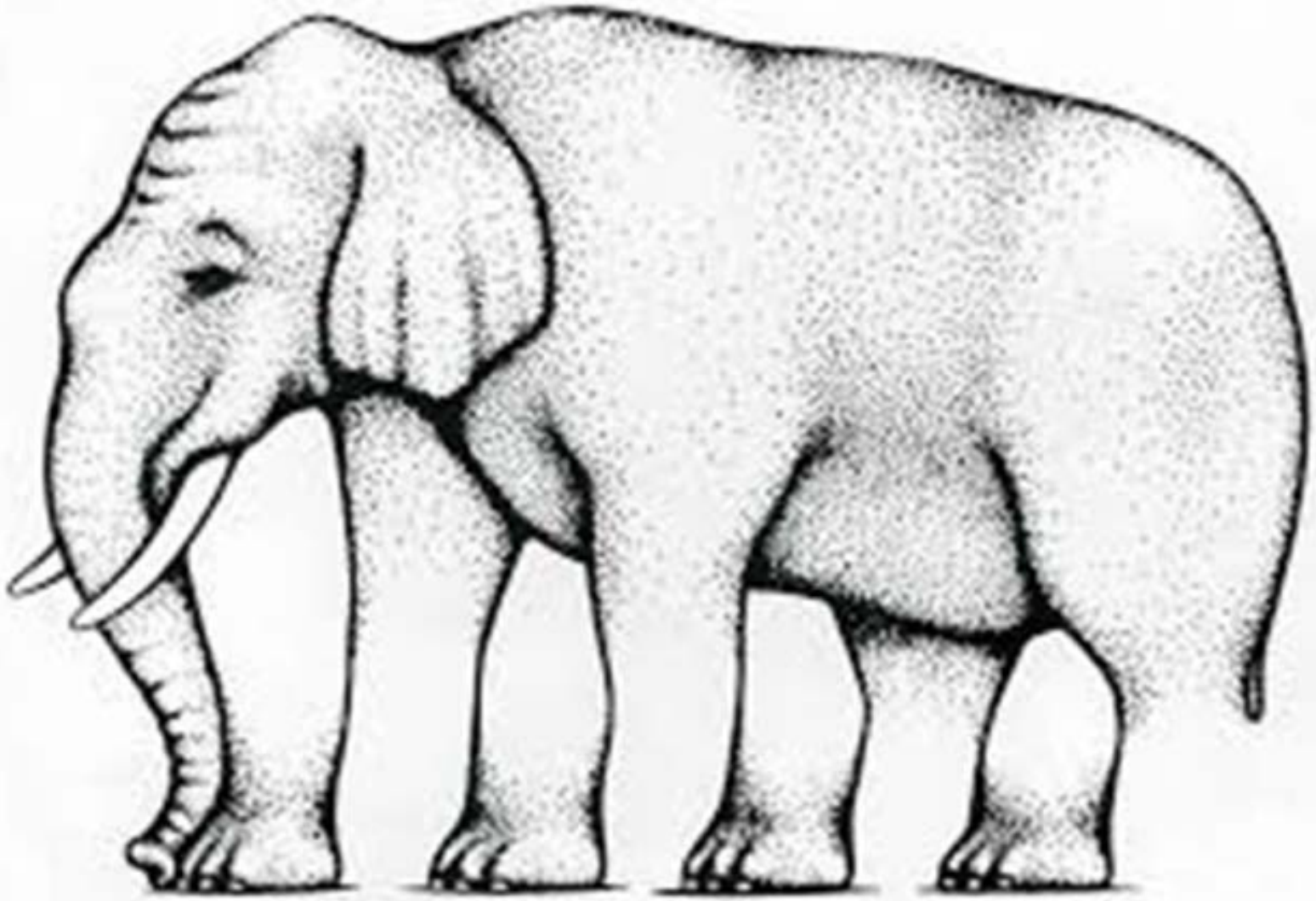
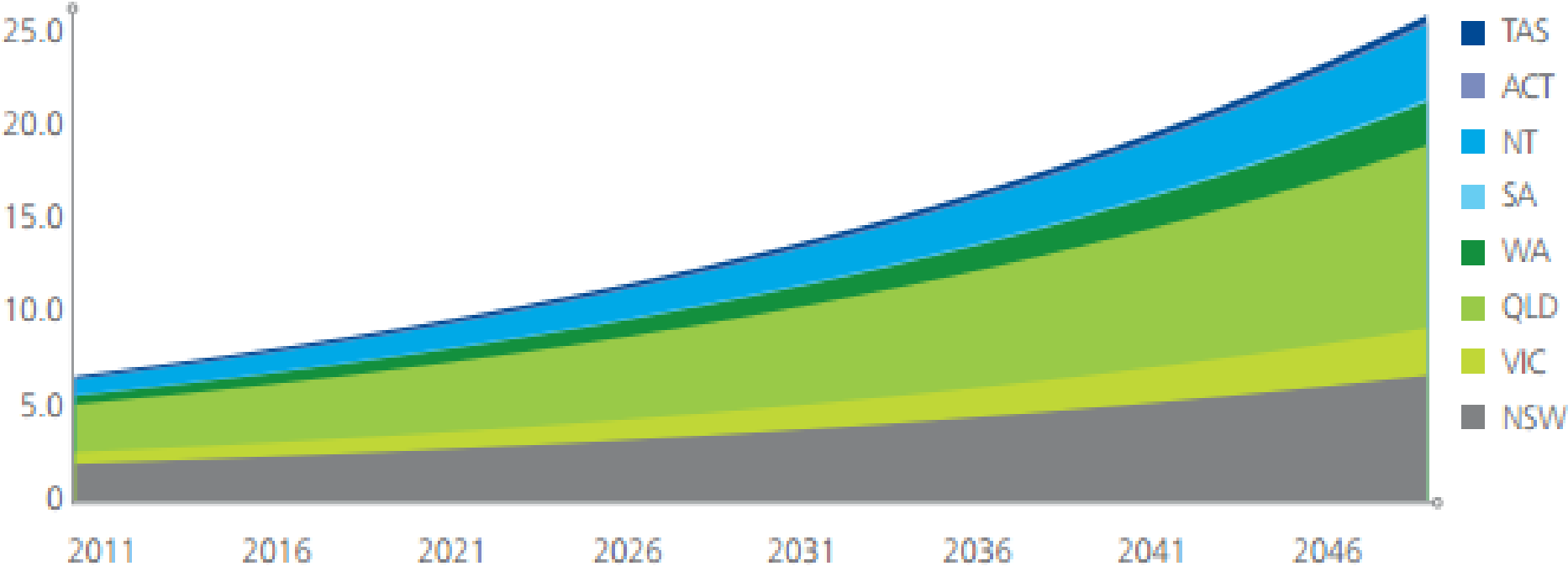


Chart 2.2: Forecast total economic cost of natural disasters: 2011 – 2050

\$bn (2011 prices)



Source: Deloitte Access Economics (2013)



“the judgment of leaders will be not only for what we said, not only for what we did, but more importantly for how we made people feel”

(Jansz 2005)



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## The Task Force on Health Promoting Hospitals and Environment

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## Program BOOKLET



AN INTERNATIONAL FORUM ON

## “DISASTER and EMERGENCY MANAGEMENT in the HEALTH CARE SECTOR”

TUESDAY, Feb 23rd 2016

Griffith University, Southbank Campus

Hosted by Centre for Environment and Population Health, Griffith University  
and co-hosted by Tzu Chi Medical Foundation, Tzu Chi University

Venue: Griffith University South Bank Campus, Griffith Graduate Centre Building (S07) Room 1.23

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