

# **12th Accident Compensation Seminar 2009** Rising to the Challenge

**Melbourne 22nd – 24th November 2009**



Institute of Actuaries of Australia



***‘Til deaf do us part ....***

## **Some thoughts on work-related hearing loss claims**

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The views expressed in this presentation are our own and do not necessarily represent those of the organisations for which we work



## What is noise induced hearing loss?

- Partial or complete loss of hearing due to exposure to loud noise
- Typically over a period of time
- Effects are permanent
- A.k.a. “Industrial deafness”, etc
- Covered by all workers’ compensation schemes in Australia and NZ



## Why should you care?

- Hearing loss claim only represent about 5% of claim numbers.....and a smaller proportion of costs
- But they have unique features and present a challenge for both claims managers and actuaries

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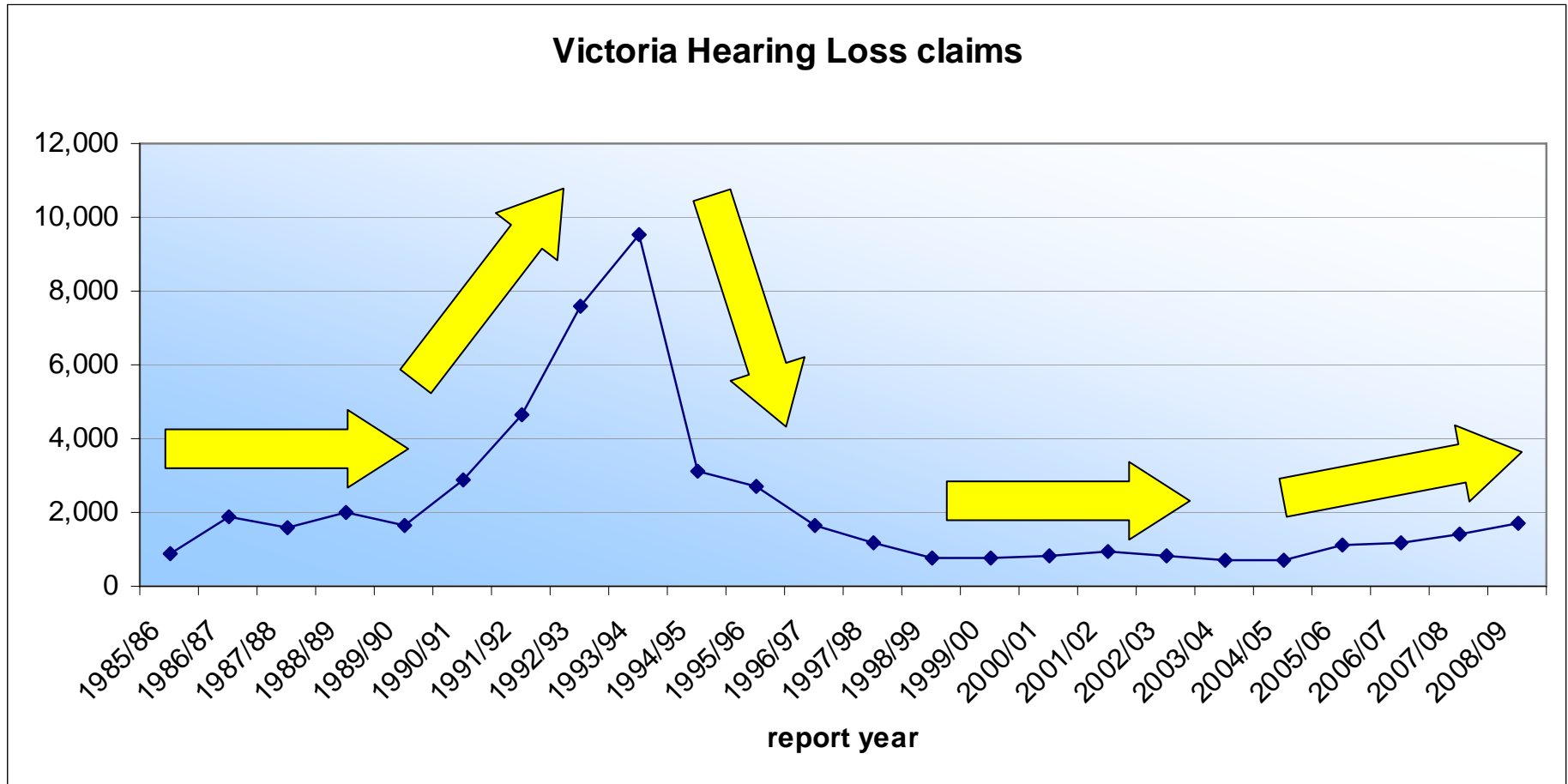
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## ... and the volume is unpredictable





## What is it that makes hearing loss claims different?

- #1 – Benefit profile
- #2 – Deeming an injury date
- #3 – The reporting “tail”
- #4 – The age profile
- #5 – Influence of provider behaviour
- #6 – Specific legislative response
- #7 – Assessment issues



## #1 – Benefit profile

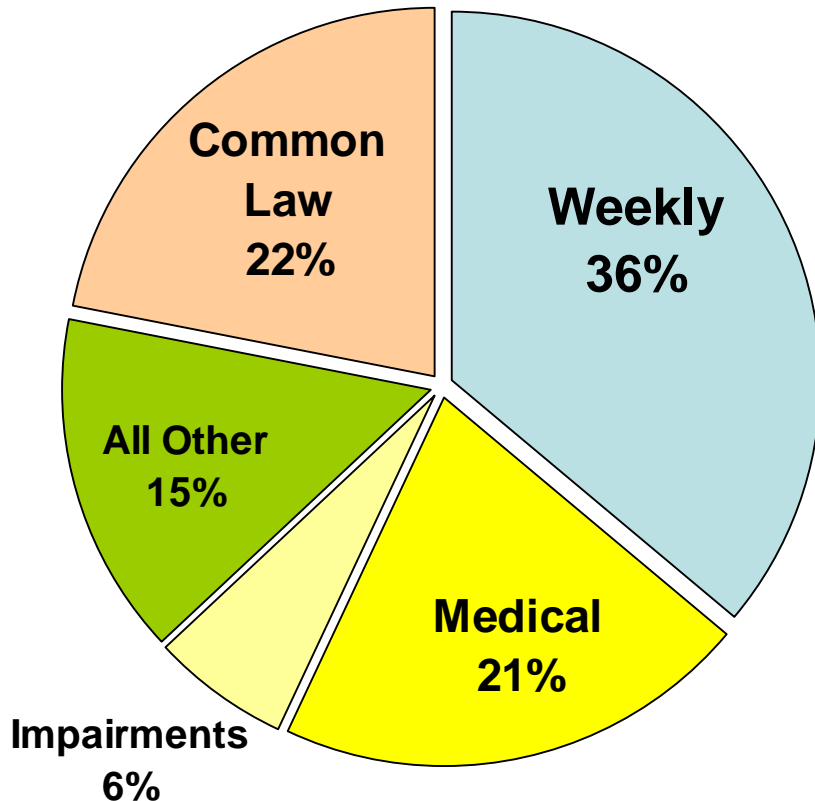
- Typically ...
  - involve no lost time
  - receive a modest statutory lump sum
  - may also have entitlement to hearing aids
    - In Vic, around 60-70% of claims that receive a statutory lump sum also receive a hearing aid
  - with some associated costs (impairment assessment, aid fitting and adjustment costs, replacement hearing aids)



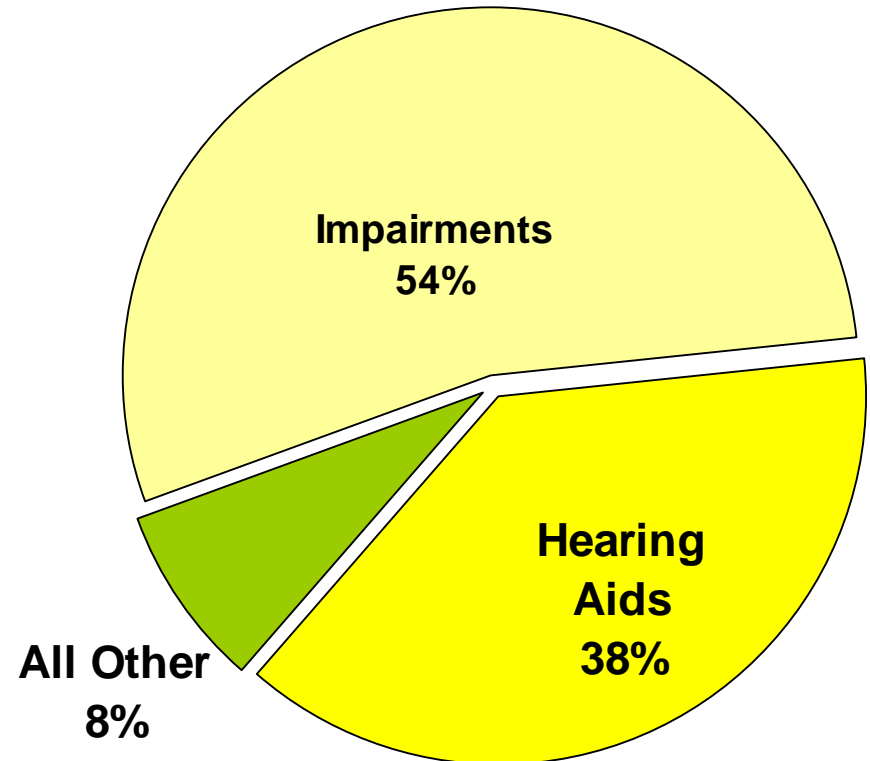


# #1 – Stark difference in profile

Victoria **General** claims  
mix of payments

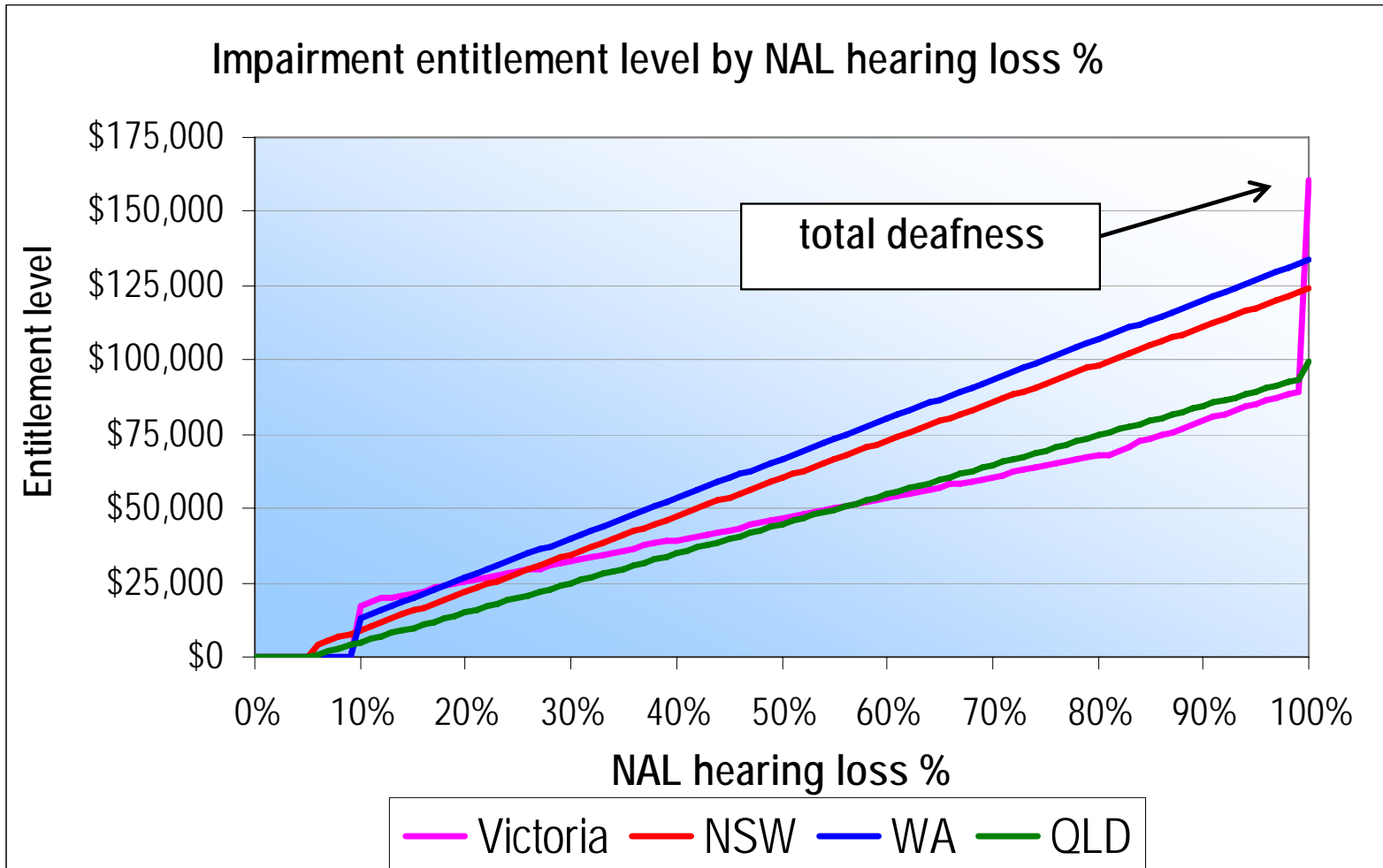


Victoria **Hearing Loss** claims  
mix of payments





# #1 - Entitlement Levels

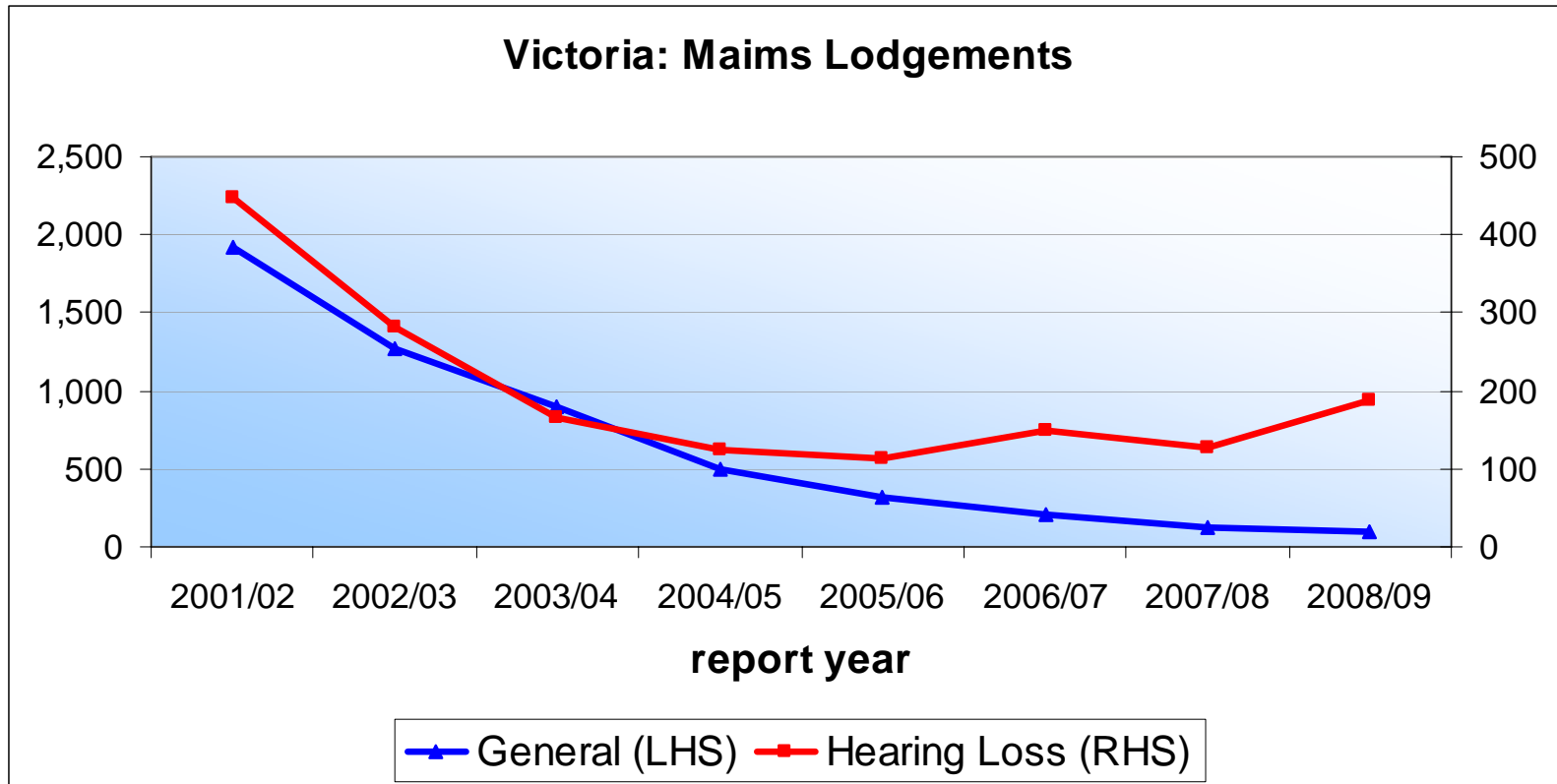






# #1 – Implications for reserving

- Separate analysis often warranted





## .... and it's not just the lump sums

- Hearing aids can be periodic (albeit with gaps in between)
- Long tail
- Take-up rate for replacements may increase
  - ageing population
  - improved devices, and new technology
  - growing acceptance?



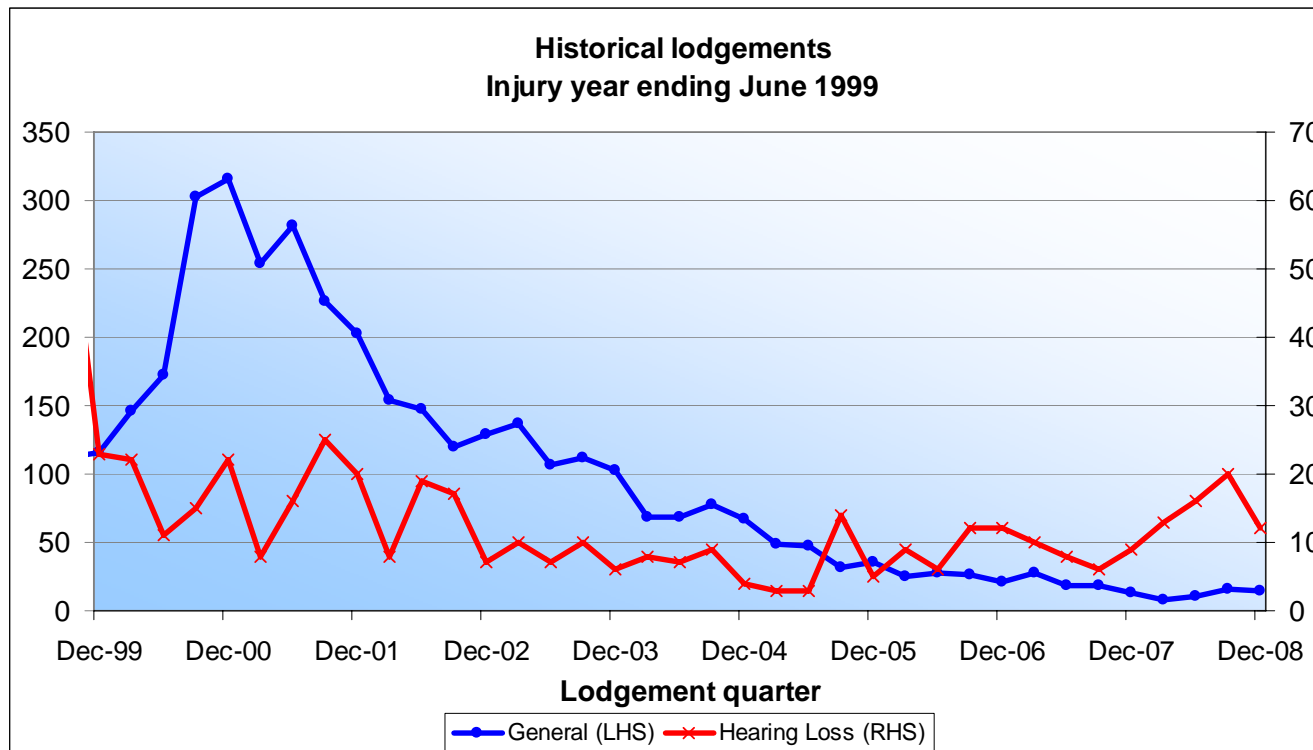
## #2 – Deeming an injury date

- Issue for gradual onset generally
- Two examples of approaches in use:
  - Victoria: last day of applicable employment, or, if still so employed, date of claim
  - New Zealand: (typically) the date treatment was first sought
- Difficulties from potential mismatch between timing of exposure and claim



## #3 - The reporting “tail”

- Example: “Impairment” lodgements in Vic; 1998/99 injury year





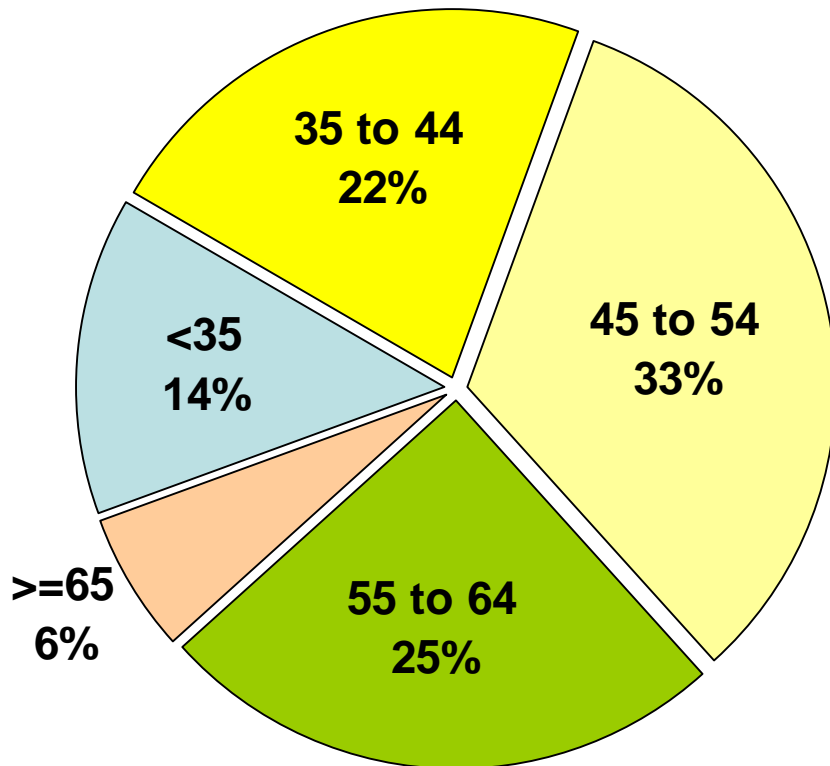
## #3 - The reporting “tail”

- Confuses reporting trends when not examined separately
- IBNR implications
- Issue for gradual onset generally

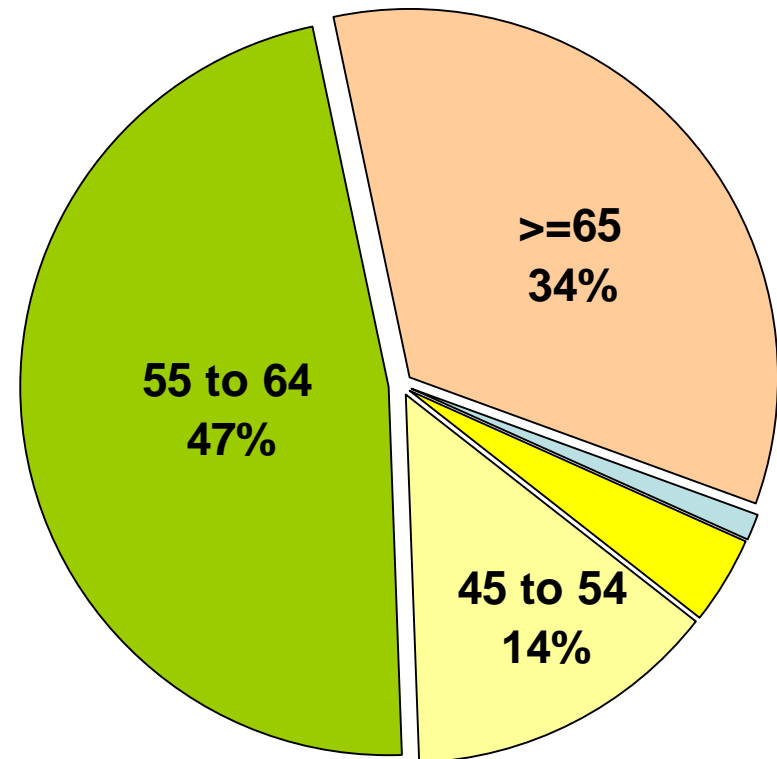


## #4 - The age profile

Victoria **General** claims



Victoria **Hearing Loss** claims



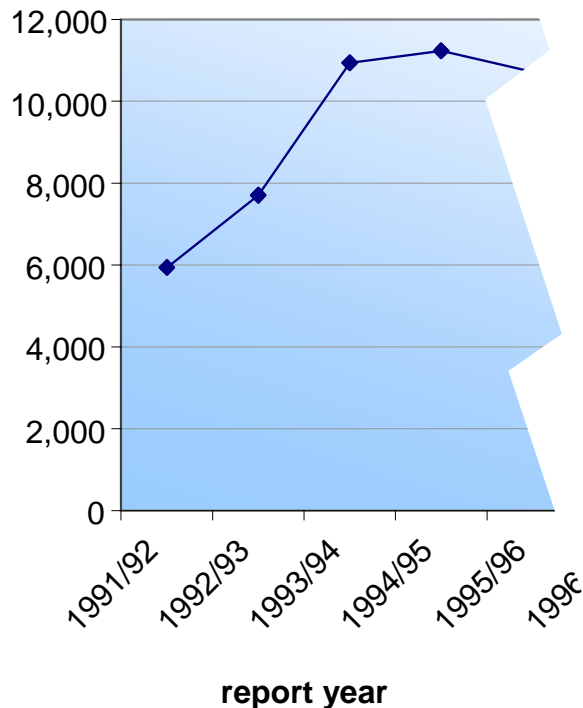




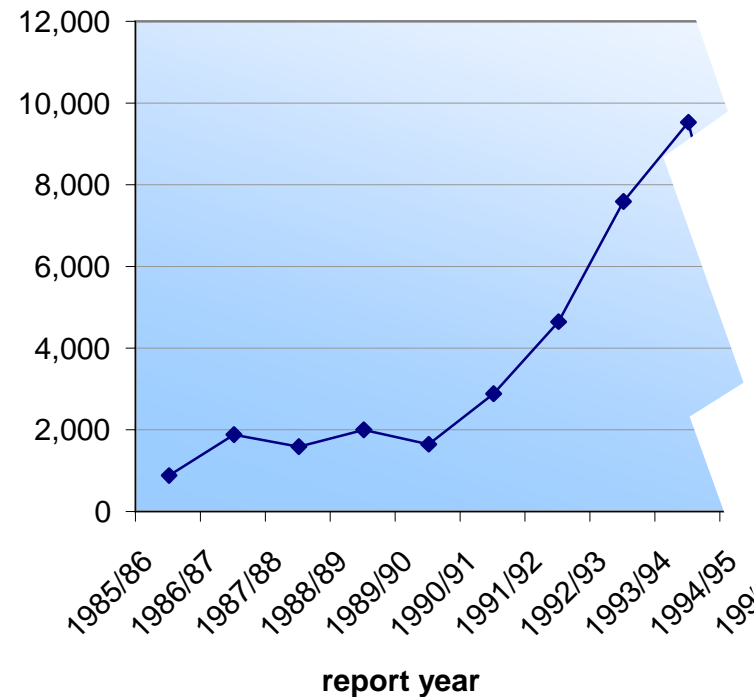
## #5 – Influence of provider behaviour

- Example: Both NSW and Vic experienced a surge in HL claims in the mid 1990s

NSW Hearing Loss claims



Victoria Hearing Loss claims



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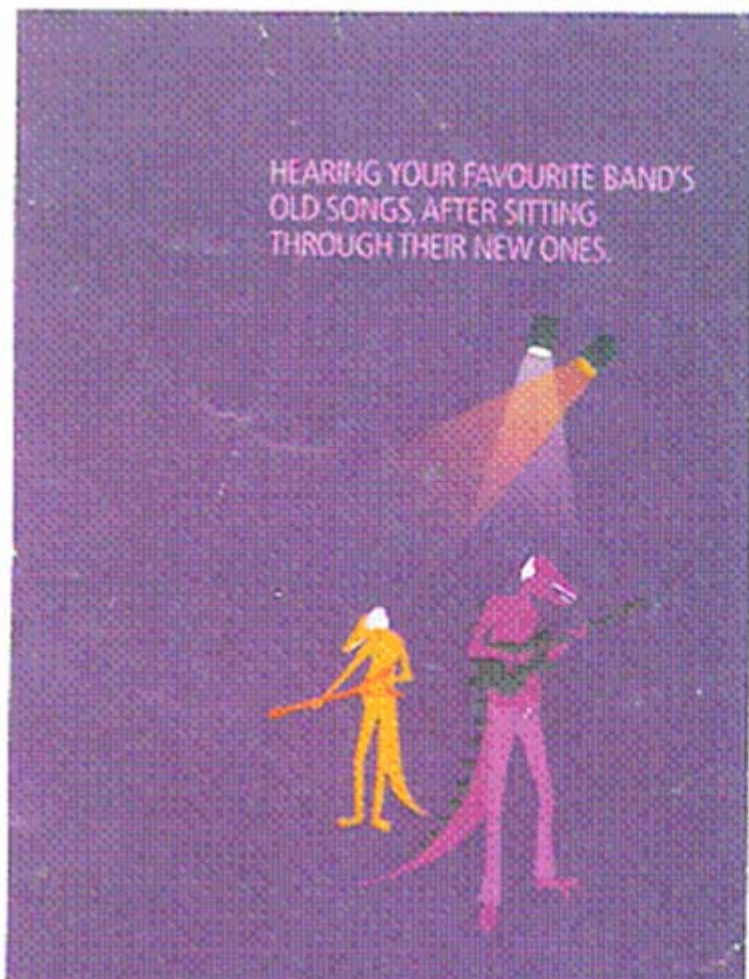
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## #5 – “The Buble effect”



HERE'S SOMETHING  
WORTH HEARING

BE ONE OF THE FIRST 20 PEOPLE TO HAVE  
YOUR HEARING SCREENED AT YOUR LOCAL  
[redacted] AND RECEIVE A  
FREE\* COPY OF MICHAEL BUBLE'S NEW ALBUM.



TO BOOK YOUR FREE\* HEARING SCREENING



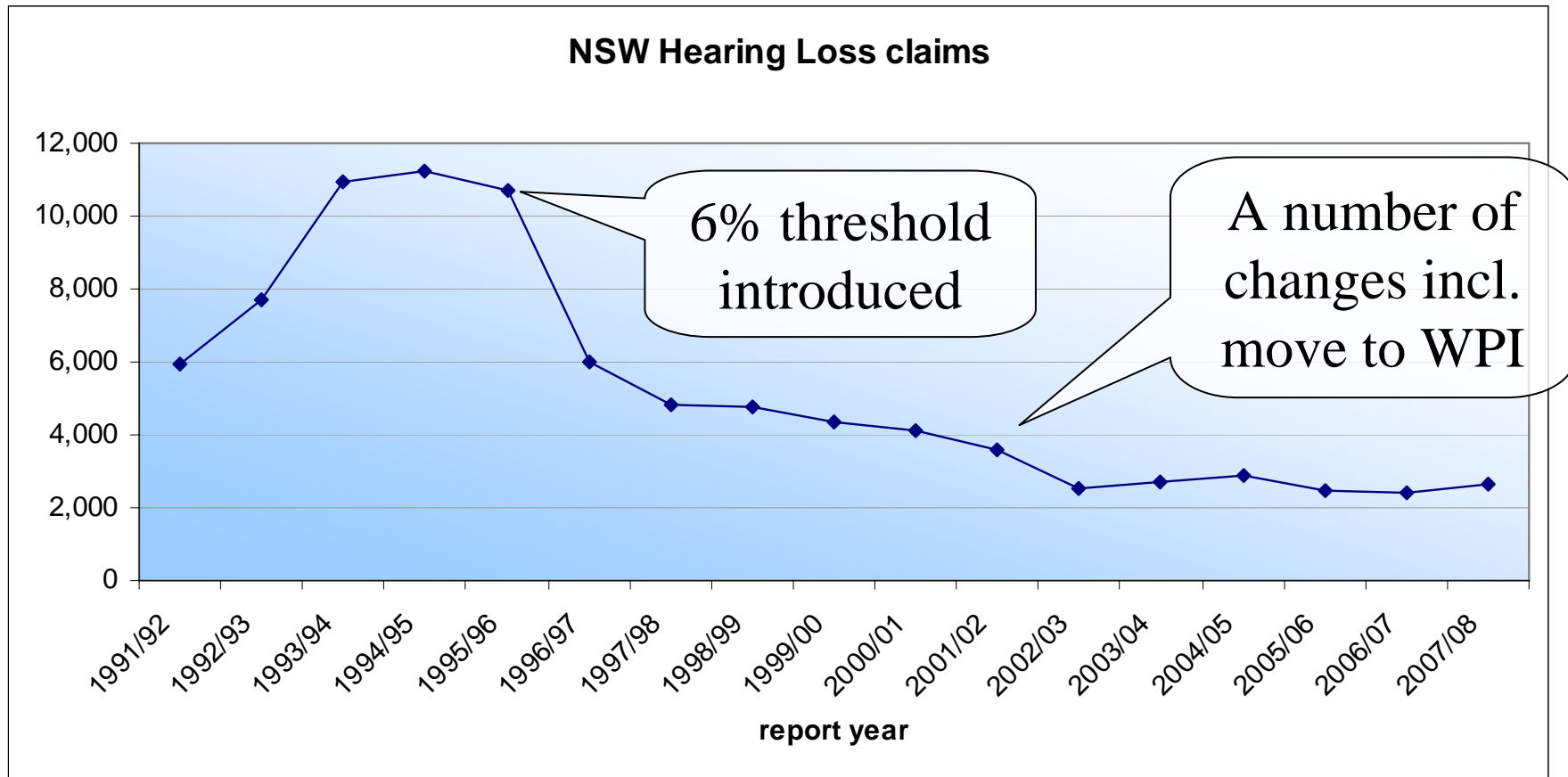
## #6 – Specific legislative responses

- Legislation often includes explicit reference to, and provisions for, hearing loss
- If HL is modelled separately, changes to legislation much easier to handle



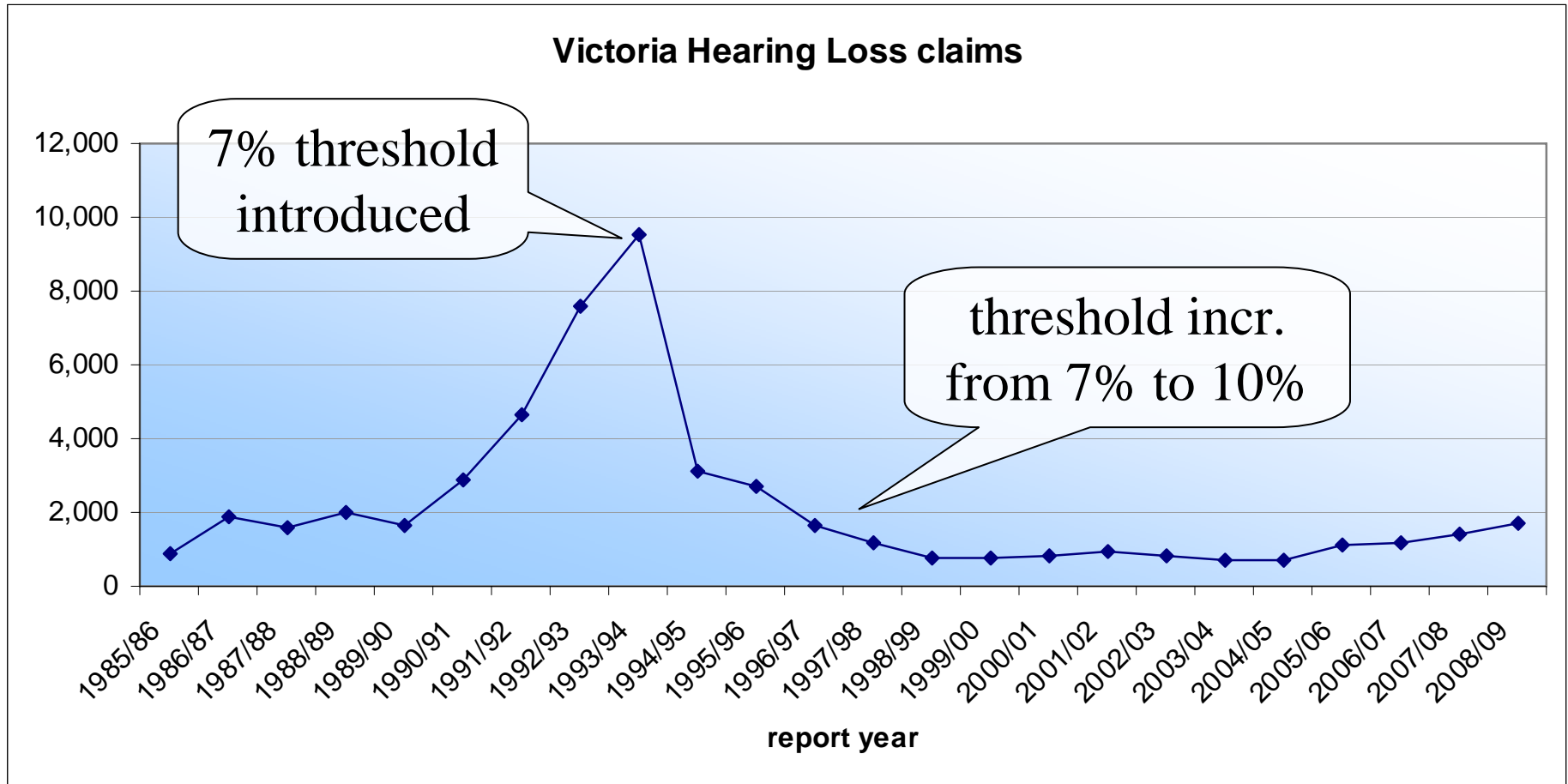


## #6 – Example: New South Wales





## #6 – Example: Victoria





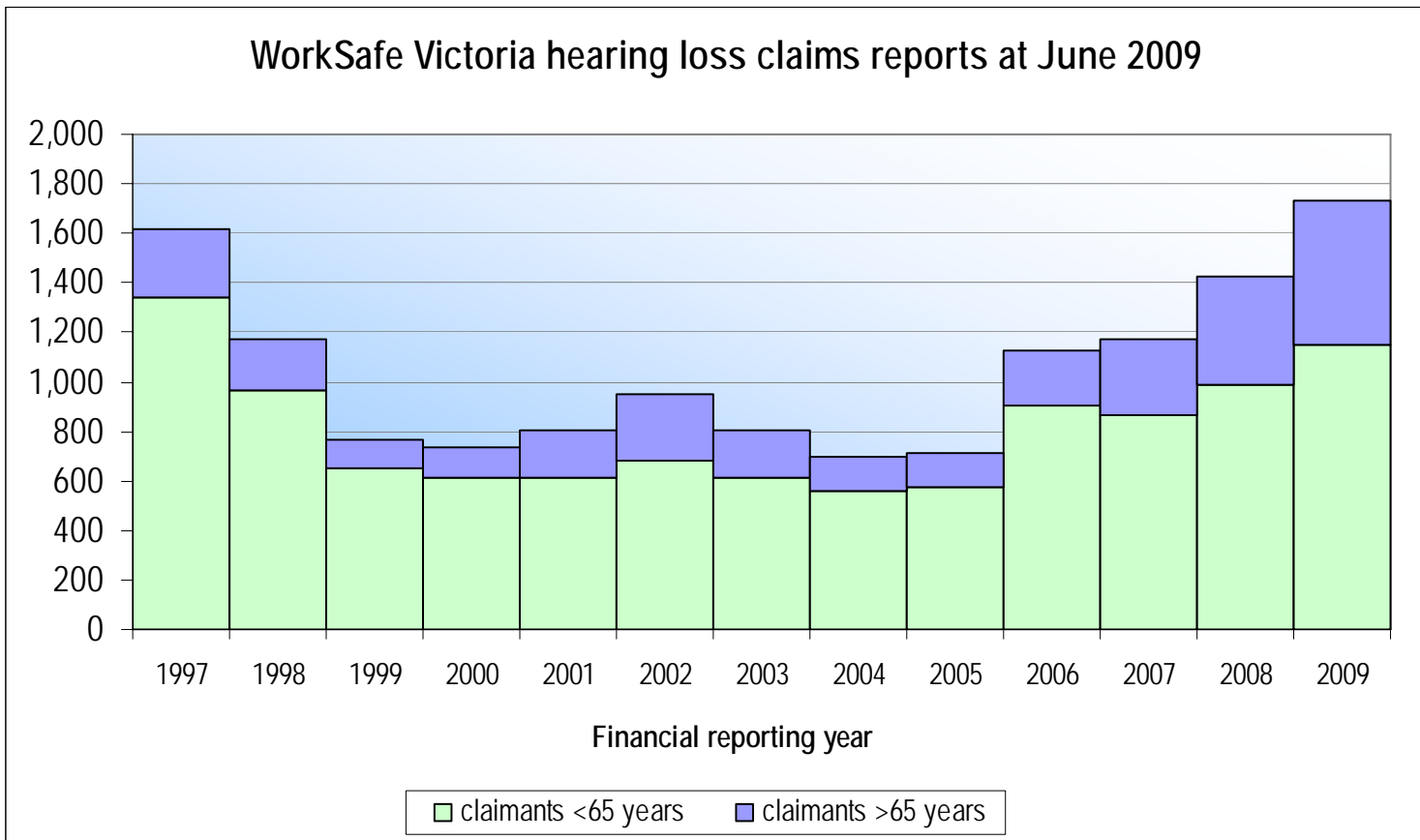
## #6 – Thresholds for lump sums

Victoria	NSW	Queensland	WA	NZ
10% NAL hearing loss	6% NAL hearing loss	5% NAL hearing loss  Requires at least 5 years employment in noisy industries.  Must be lodged within 12 months of retirement.	10% NAL hearing loss.  Compensation cannot be claimed after a worker turns 65.  Must be lodged within 12 months of retirement.	30% hearing loss as per AMA4





## #6 – Example: Overlay WA age restriction on Vic data





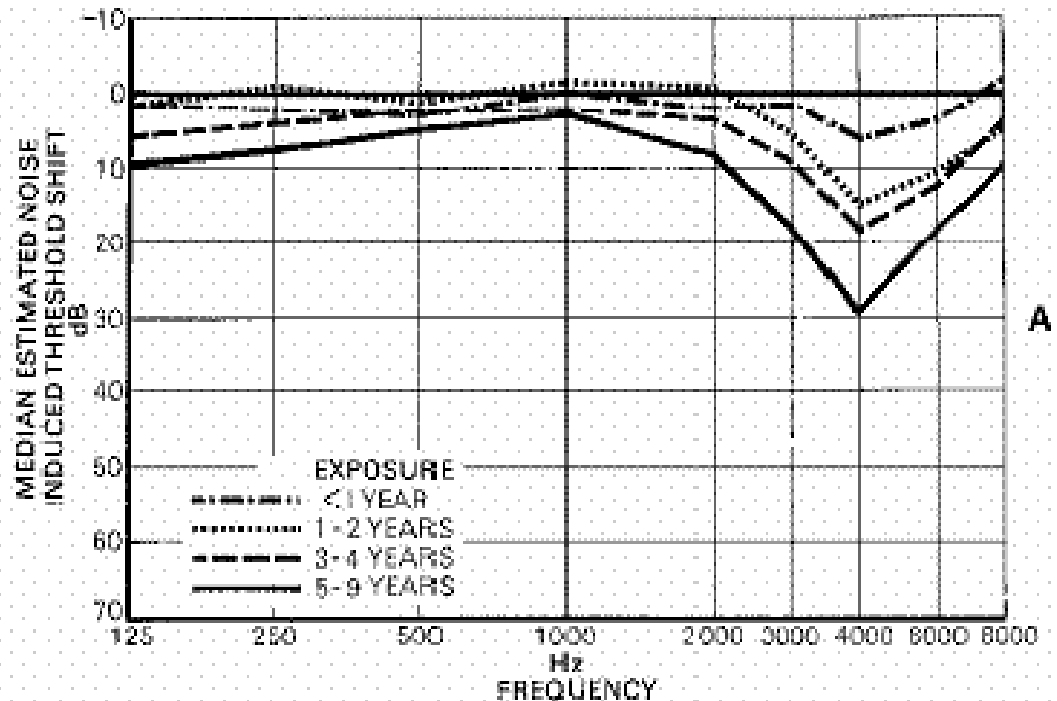
## #7 - Hearing Loss Assessment

- Hearing test
- Assesses both **functional** and **measurable** hearing loss
- Limitations of most common form of testing (pure tone audiometry)



## .... and cause not always clear

- Asymmetry
- Age-related
- “Noise notch”
- But what sort of noise?



\* Source: Thorne, 2006

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## Some final thoughts

This is not just a problem of the past