



Surveillance of mesothelioma in Australia

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I declare no conflict of interest

Acknowledgements



safe work australia



MONASH

Centre for Occupational
and Environmental Health



Australian Government

Comcare



Australian Government

Australian Institute of
Health and Welfare



THE UNIVERSITY OF
SYDNEY

ADRI



Asbestos Diseases Research Institute



Social Research Centre



THE UNIVERSITY OF
WESTERN
AUSTRALIA



cancer
institute
NSW



HUNTER RESEARCH
FOUNDATION

Outline

- › History of mesothelioma surveillance in Australia
- › Description of Australian Mesothelioma Register
 - › - aims
 - › - procedures
 - › - summary of recent results
 - › - exposure information

History of mesothelioma surveillance in Australia



History of mesothelioma surveillance in Australia

- › 1980 – 1985: Australian Mesothelioma Program
- › 1986 – 200?: Australian Mesothelioma Register
- › 2010 – onwards: Australian Mesothelioma Registry
 - › - 2010-2018: managed by NSW Cancer Institute
 - › - 2018 – onwards: managed by Australian Institute of Health and Welfare

Australian Mesothelioma Program

- › Formal voluntary notification from multiple sources
- › Full occupational and environmental history
- › Exposure history assessed by two experienced hygienists
- › Tissue diagnosis for most cases and slides sent to pathology panel
- › Basis for a range of publications

Australian Mesothelioma Register

- › Formal but less detailed voluntary notification from multiple sources
- › Short exposure history questionnaire
- › Exposure history assessed by two experienced hygienists
- › Only histologically-confirmed cases accepted
- › Annual reports

Australian Mesothelioma Register 2

- › Decreased notifications due to new privacy laws in Australia
- › Register effectively closed for several years
- › Resurrected as the Australian Mesothelioma Registry

Australian Mesothelioma Registry





Australian Mesothelioma Registry

- › National registry of all mesothelioma cases diagnosed since 1 July 2010
- › Includes incidence and mortality information
- › Includes associated asbestos exposure data for consenting patients

Aims of the AMR

- › To monitor the incidence of mesothelioma in Australia
- › To monitor patterns of occupational and environmental exposure of patients
- › To make this information widely available
- › To prevent mesothelioma in the future by informing government policy and providing a resource to researchers

Data collection

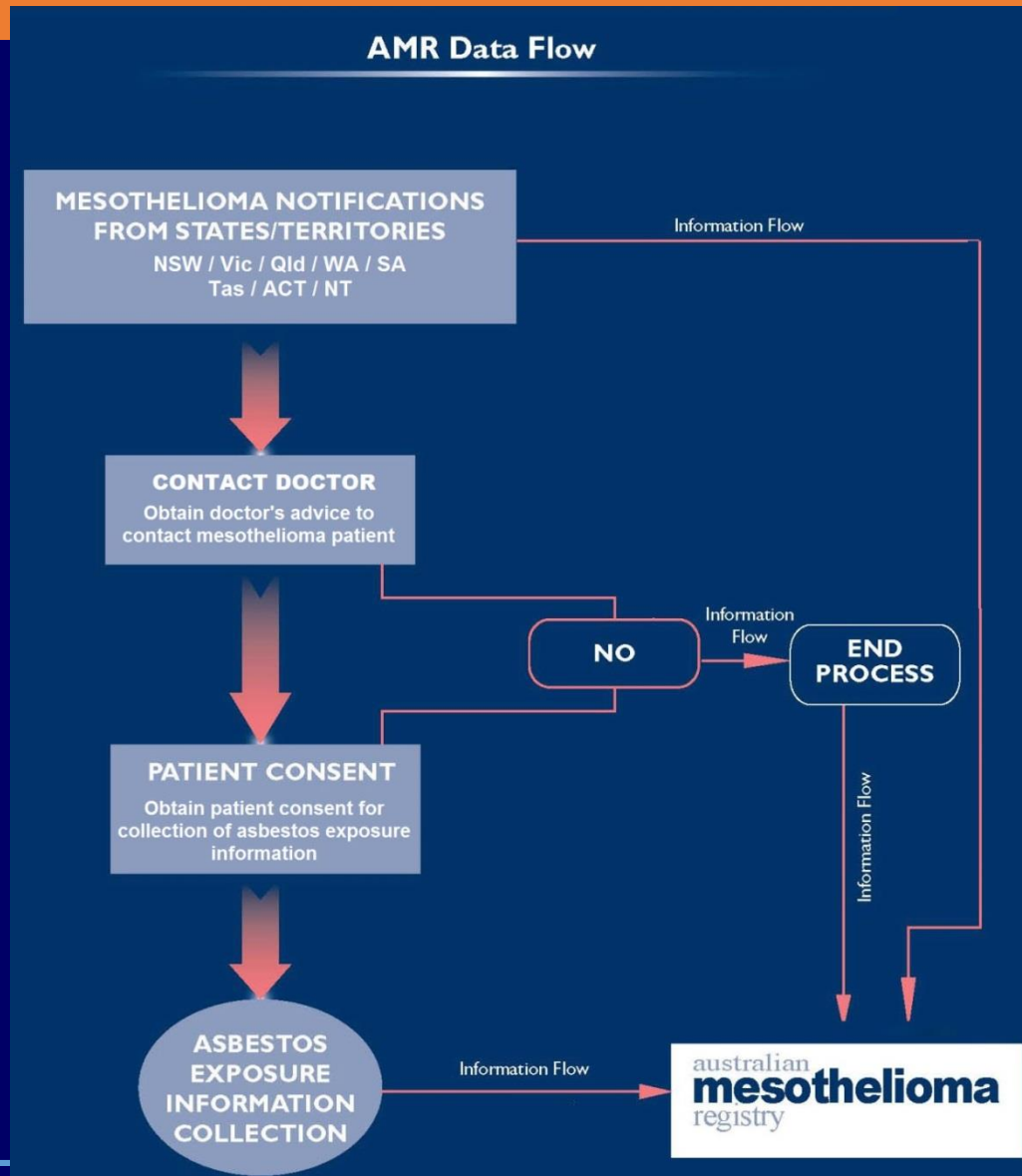
- Incidence and mortality
 - Based on mandatory cancer notifications from State and Territory Cancer Registries (fast-tracked)
 - Routine annual linkage to Australian Institute of Health and Welfare's National Death Index
- Asbestos exposure information
 - directly from patients
 - postal questionnaire and telephone interview
 - occupational and environmental exposure

Process: Incidence/Mortality & Consent





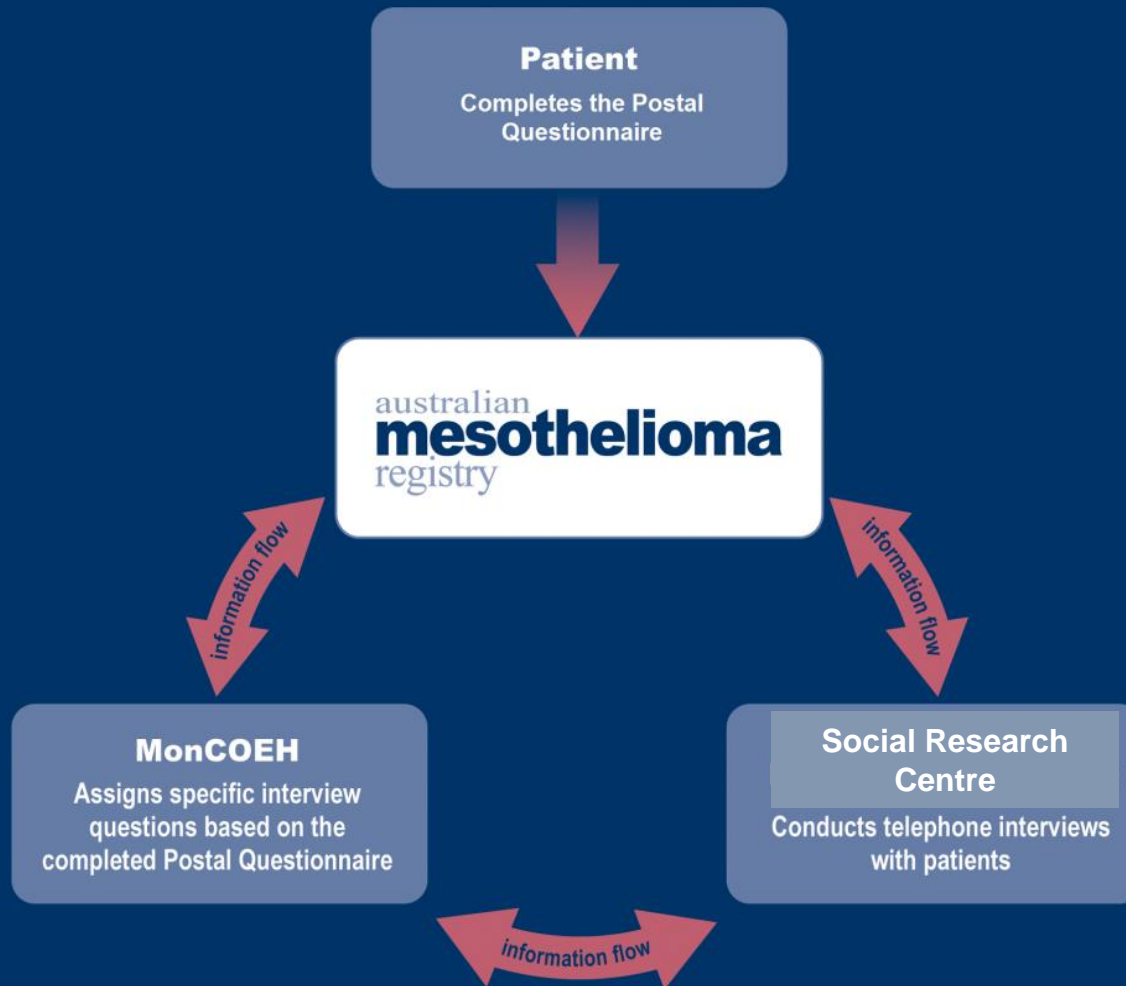
Process: Incidence/Mortality & Consent





Process: Asbestos Exposure Information Collection

Asbestos Exposure Information Collection



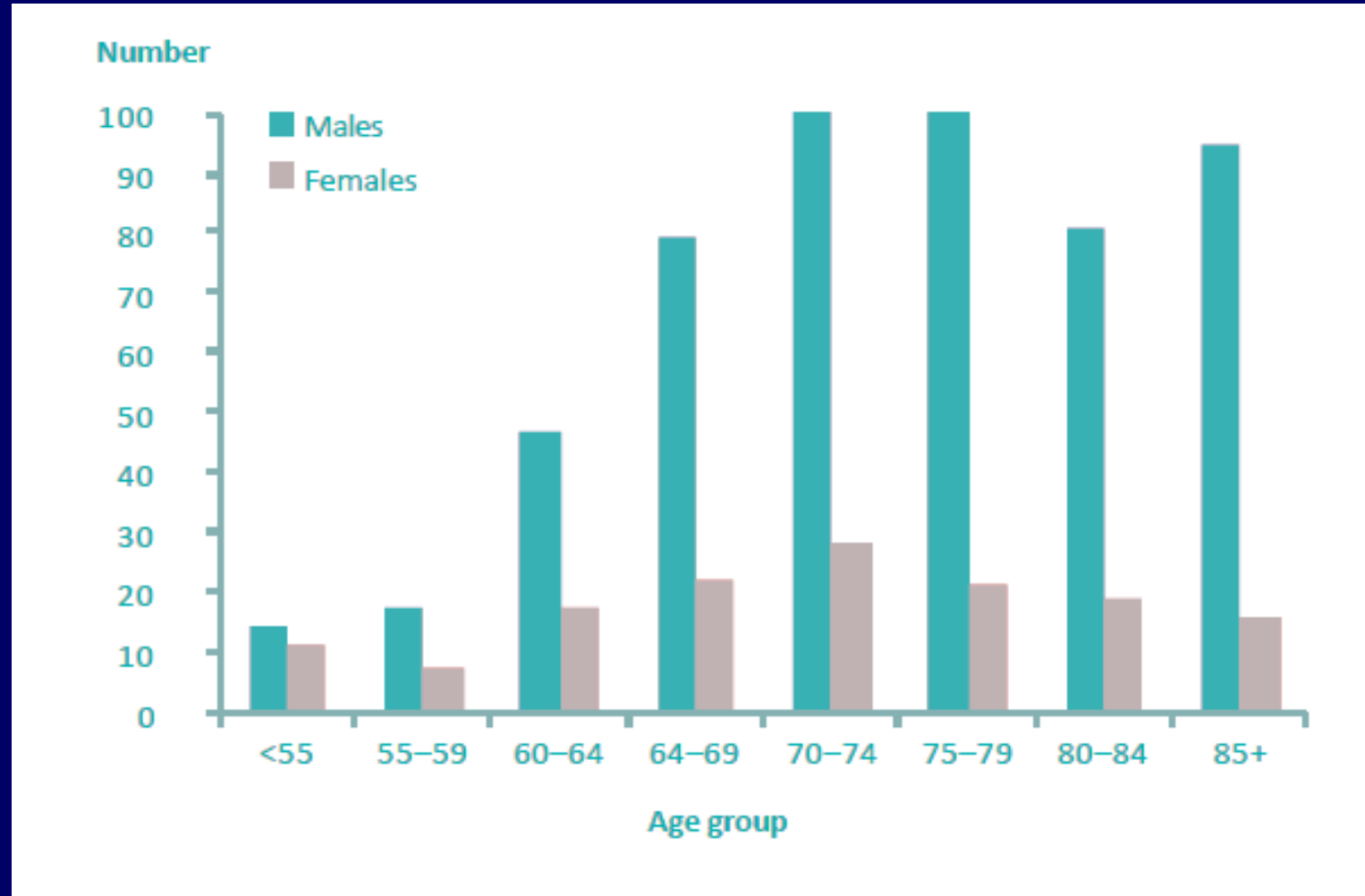
Mesothelioma, 2016



Mesothelioma, 2016

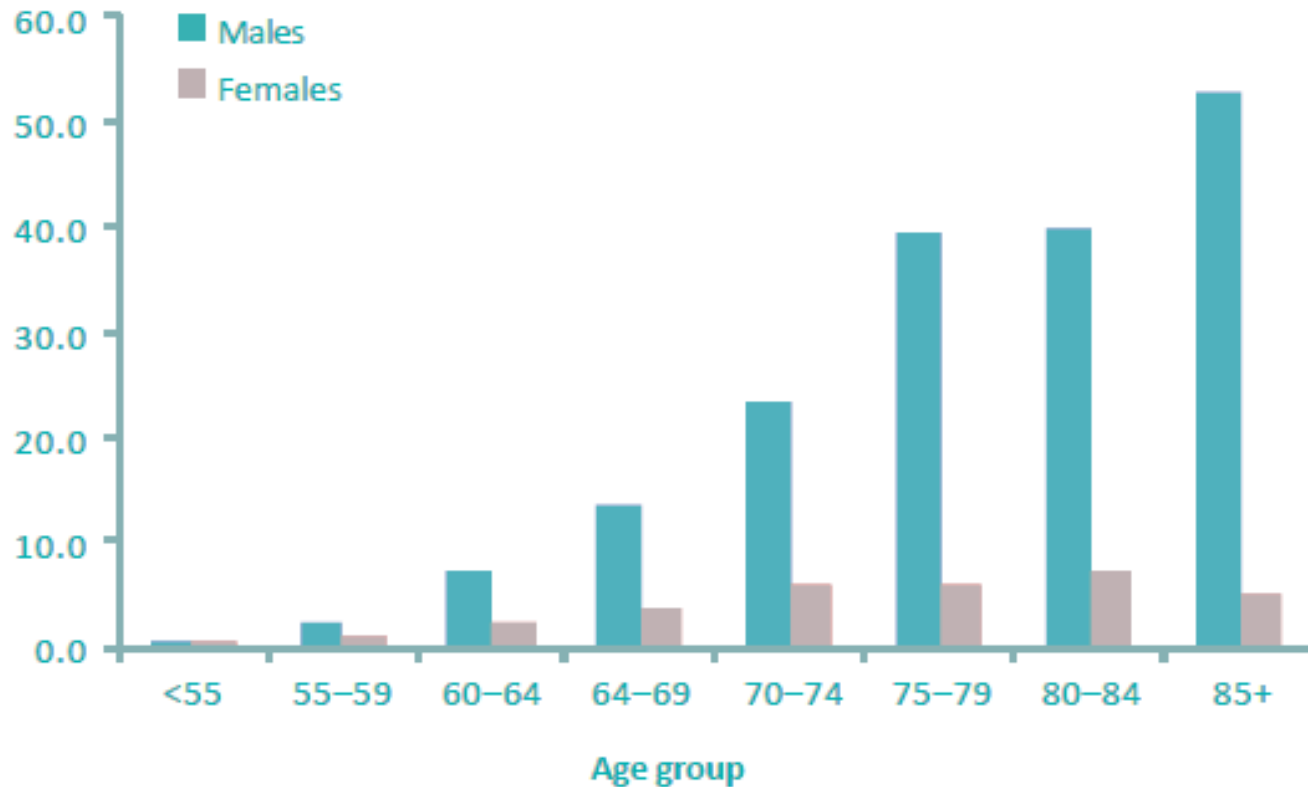
- › 700 cases of mesothelioma were notified in 2016 to the AMR (at 31 May 2017)
- › Rate of 2.5 per 100,000 population (age-standardised)
 - Males: 4.2 per 100,000
 - Females: 0.9 per 100,000
- › Males accounted for 80% of notified cases
- › 84% of patients were aged 65 years or over

Mesothelioma – new cases by age and sex (2016)



Mesothelioma – incidence by age and sex (2016)

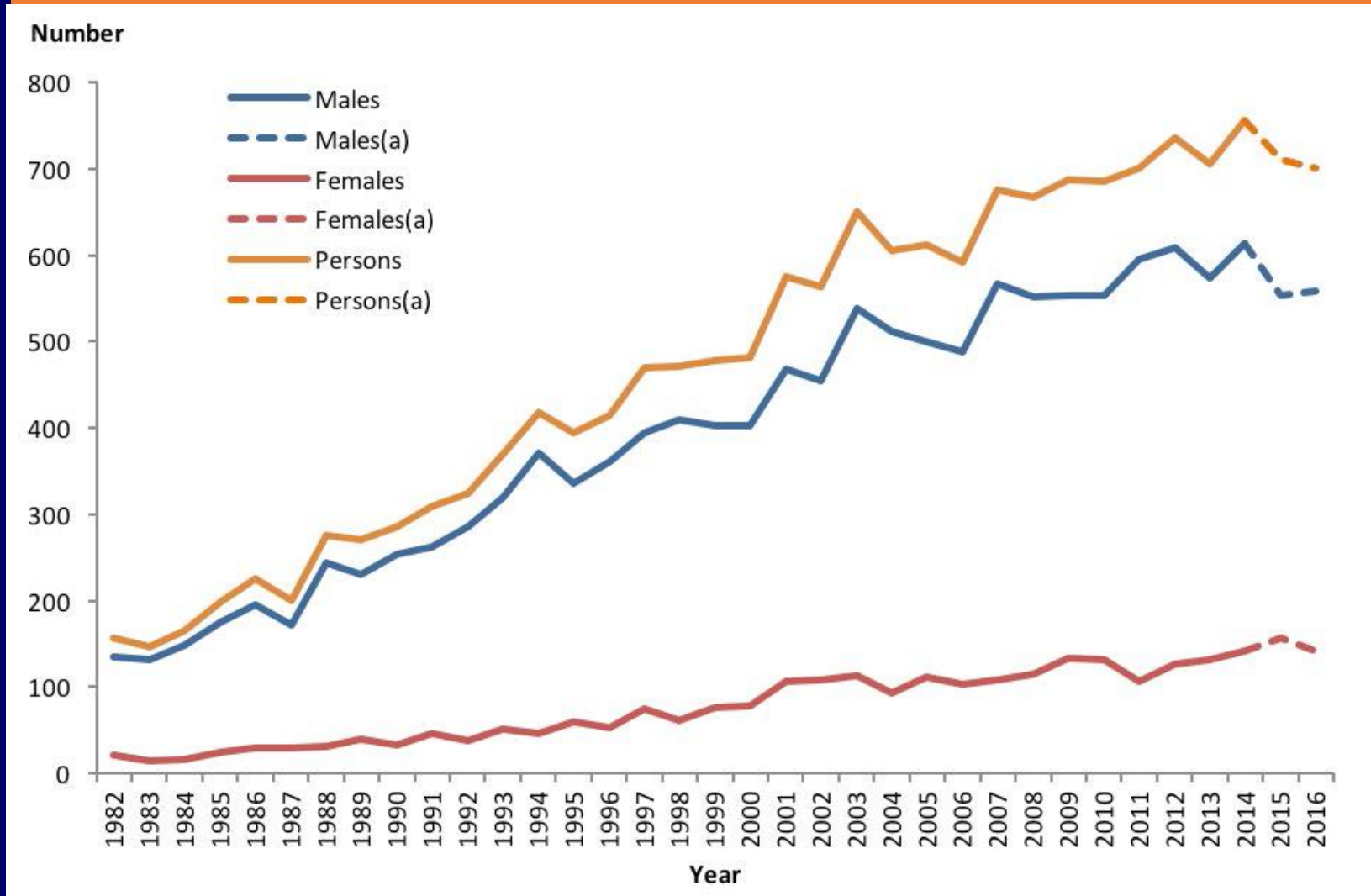
Rate per 100,000



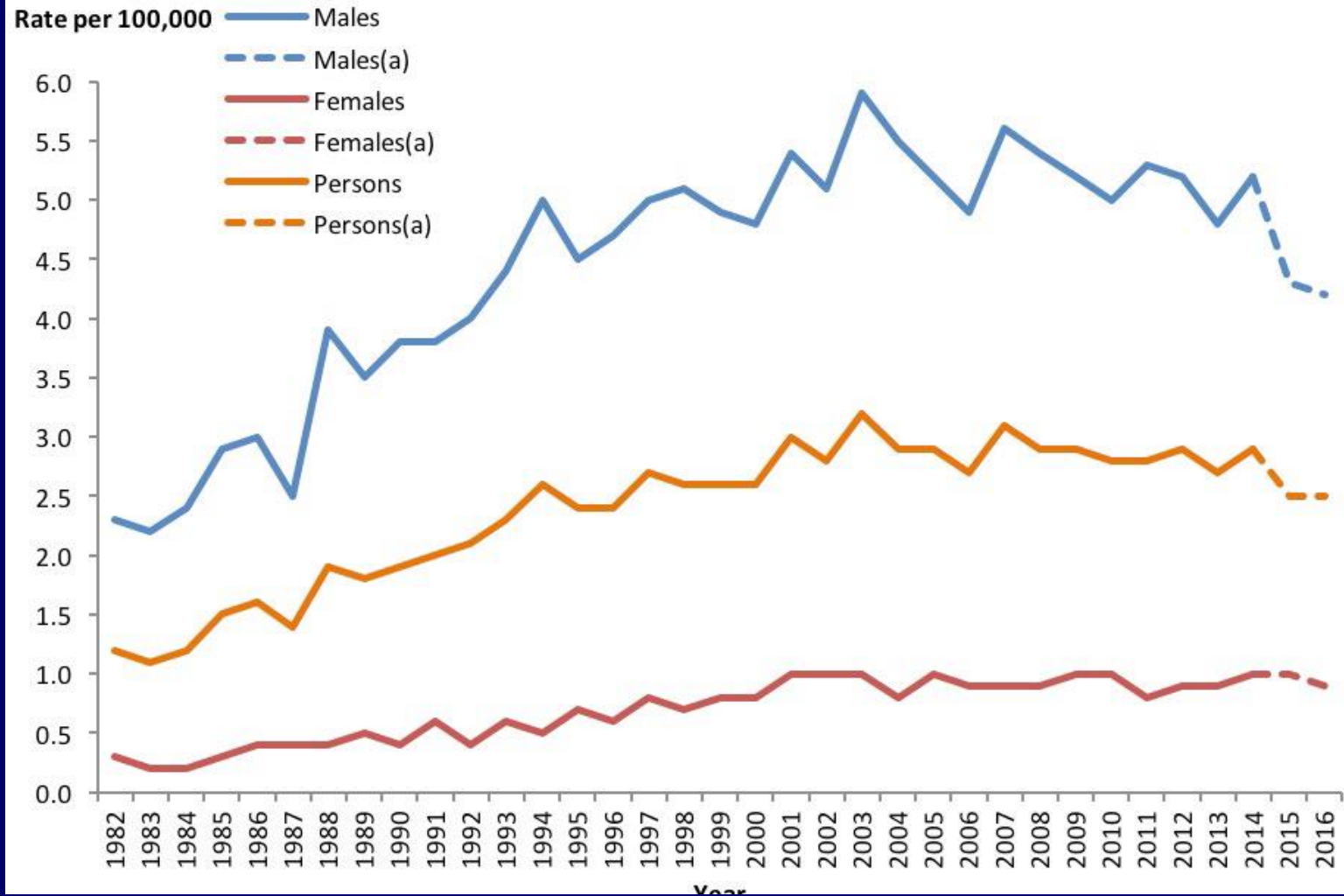
Mesothelioma incidence and mortality, 2016

- › Most common subtype of mesothelioma was epithelioid subtype (49%)
- › Most common location was the pleura (93%)
- › Right-sided in 59% of cases
- › Mesothelioma was the cause of death in 90% of cases where CoD was known.

Mesothelioma – new cases by year and sex



Mesothelioma - incidence by year and sex



From 2016 Mesothelioma Registry Annual Report

Asbestos exposure



Asbestos exposure

- › Of 701 patients for whom asbestos exposure was assessed:
 - 419 (60%) cases had 'possible' or 'probable' occupational exposure
 - 232 (33%) cases probably only had non-occupational exposure
 - 570 cases (81%) had 'possible' or probable' exposure in non-occupational contexts
 - 50 cases (7%) had no identified asbestos exposure

From 2016 Mesothelioma Registry Annual Report (work by Monash University)

Asbestos exposure

- › Job types with highest exposure likelihood:
 1. Construction and building-related trades
 2. Electrical and related trades

- › Most common circumstances of possible or probable non-occupational exposure:
 1. Home renovation-related activities
 2. Car maintenance

Conclusions



Conclusions

- › Active mesothelioma surveillance has been undertaken in Australia for nearly 40 years.
- › This has highlighted many aspects of the burden due to asbestos.
- › Maintaining the surveillance in a useful form has been challenging.
- › Obtaining detailed and representative exposure information has been particularly challenging
- › The Mesothelioma Registry is an important education and information resource for the Australian community.

