

# Asbestos NEPM Review update

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Where are we

# NEPM (Assessment of Site Contaminated) Review

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- Recommendation 12
- The NEPM be revised to provide more information, based on existing documentation, relating to the investigation and assessment of various forms of asbestos.

# Issues in the NEPM variation

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- Stakeholders want to reduce costs of unnecessary remediation, esp dig and dump
- Unions want to protect workers – 25k cases of meso yet to occur, 3rd wave of para-occupational and trades not directly involved in asbestos production or power, marine and other industries closely linked to fibrous asbestos exposure
- Political pressure: Ministerial Councils seeking research into cures and stricter OHS regs, national audit of asbestos in buildings
- Relentless media approach of fear and loathing – public perception that one fibre can kill

# Proposals

The NEPM variation team has proposed that:

- the NEPM guidance (for assessment of asbestos contamination) be closely based on the WA DoH guidelines.
- the NEPM guidance will include principles for management and remediation
- the WA DoH guidance for management and remediation be taken up into jurisdictional auditors' guidelines

# Inbuilt conservatism (safety)

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- Ca risk 1 in  $10^{-6}$
- Exposure scenarios – 70 years for residential A – and derived default exposure ratios for other exposure scenarios DEF
- No difference between asbestos types ie chrysotile as potent as crocidolite or amosite
- Dutch-Australia – extra 10-fold SF for dry soil
- Basing risk calculation on fibre release from ACM is conservative because:
  - fragments will rarely brake down to liberate all contained fibre bundles
  - not all fibre bundles will yield respirable fibres
  - fragments in clay soils can be heavily coated with soil not exposing asbestos fibres at the fragment surface

# Background exposure

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- WHO urban population – ambient air  
average exposure 0.00003 f/ml for 70  
years = 15 million fibres = 0.0021 f/ml-y
  
- USA - indoor air  
median 0.0004 – 0.0005 f/ml for 70 years  
= 200 million fibres = 0.035 f/ml-y

# Epidemiology

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Mesothelioma risk for cumulative exposure of 0.1 f/ml-y

Crocidolite	25-350 deaths/100,000
Amosite	2-80 deaths/100,000
Chrysotile	0-4 deaths/100,000

(Hodgson and Darnton (2000 Ann. Occup. Hyg. 44 (8) 565-601)

# What next

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- Proposed NEPM Guidance will be subject of a workshop later this year - consultants, auditors, regulators
- Consultants/auditors insurers will be engaged and informed of new proposed guidelines and ramifications for actuarial calculations
- Extensive public consultation mid-2010  
(draft variation and impact statement)