



WORKING FOR A HEALTHY FUTURE

## Comments on the NIOSH Asbestos fibers and other EMPs: State of the Science and Roadmap for Research

Overall: The plan is broadly sound and is aimed on important research questions that need to be answered

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# Epidemiology...

- Conclusion... “inconclusive as opposed to negative evidence regarding the health hazards associated with exposure to nonasbestosiform EMPs”
- Confounding from smoking in the NY talc workers studies
  - Axelson – implausible that confounding increase risks by 2-fold
  - However, the MMMF studies in Europe found just this

# Exposure assessment...

- I support the plans for research on EMP exposures
  - Focus on EM analysis for research
  - Consider further developing automated methods for counting and sizing fibres
- Understanding how fibres are released into the air is important, e.g. from soils or non-fibrous matrix

# Thresholds...

- Studies from John Davis and colleagues...
  - IP injection studies showed time to first tumour and mean induction period increased with reducing dose
  - Inhalation studies with long and short fibre amosite (and chrysotile)
    - long fibres produced pulmonary fibrosis and pulmonary tumours
    - the short fibre amosite produced neither fibrosis nor tumours
    - short fibre chrysotile produced a small amount of fibrosis and some tumours, roughly in proportion to the number of long fibres

# Secondary prevention...

- Very important to identify reliable early detection of mesothelioma (and lung cancer)
- Understanding current and past exposure prevalence and exposures will help target surveillance
  - Developments in exposure databases in Europe
- Genetic determinants of risk of mesothelioma (and lung cancer)?

# Change in direction?

- The work should be integrated:
  - Toxicology, Epidemiology, Exposure assessment
  - Asbestos, other natural EMP, synthetic EMP
- International experience may be relevant for epidemiology
  - Consider a wider review/meta analysis of evidence on EMPs
- Focus measurement on EM for research and OM for surveillance
  - Increasing sensitivity of OM fibre counting may not be an important priority