



# Exposure measurements on wood dust

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WOOD DUST

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# WOODEX: Exposure measurement data

- **Denmark** Danish NIOH and Dr Vivi Schlünssen's study
  - **France** COLCHIC data base, INRS and CRAM
  - **Germany** Holz-Berufsgenossenschaft, Munich
  - **the Netherlands**  
studies of Wageningen Agricultural University  
and Utrecht University
  - **the UK** Health and Safety Executive (HSE)
  - **Finland** FIOH
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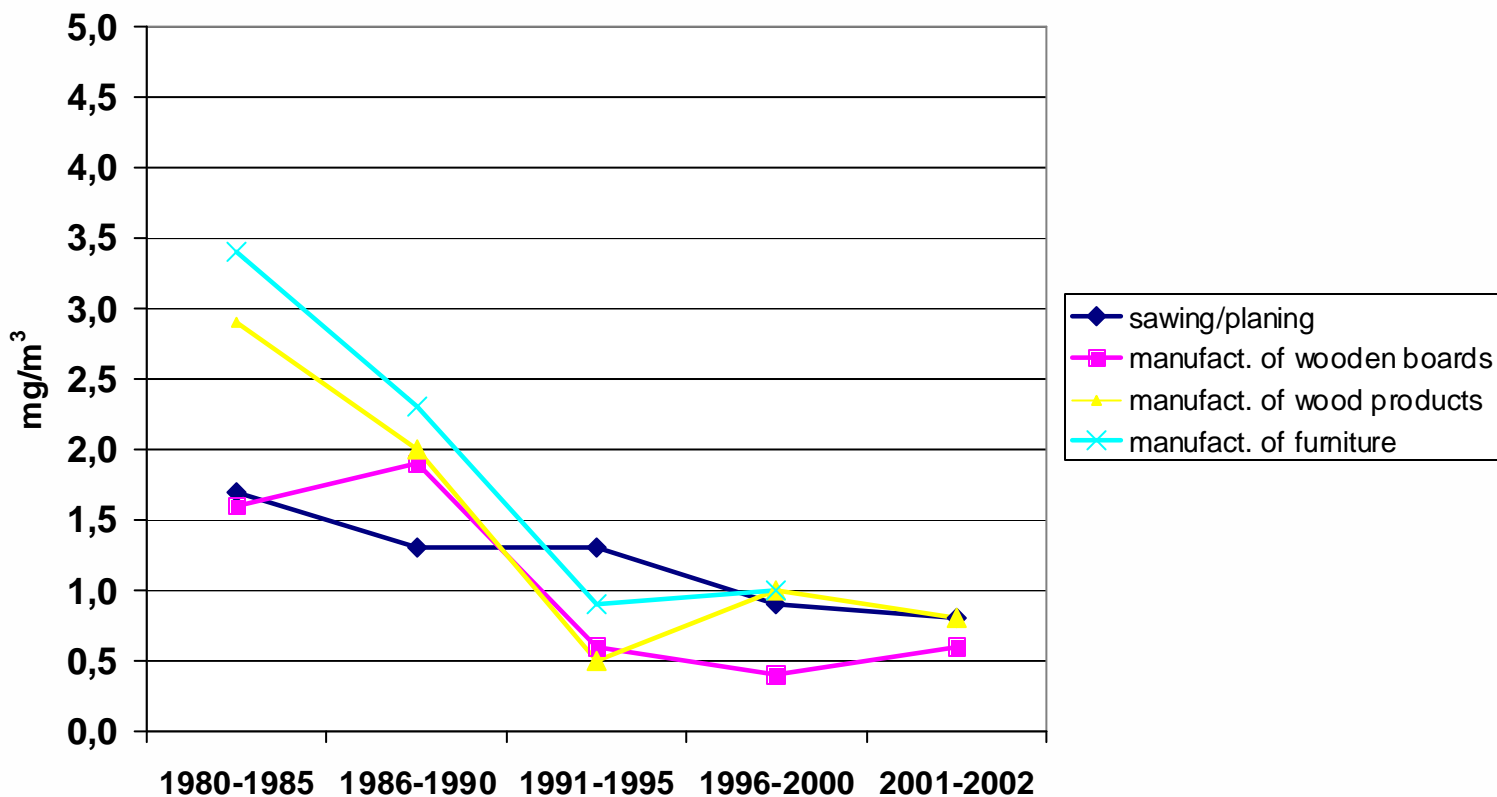
## WOODEX: Exposure measurement data

	Total number of measurements	Number of measurements used in estimation
Denmark	2 970	1 900
France	7 880	5 000
Germany	20 870	8 930
the Netherlands	530	360
the UK	2 260	790 (400)
Finland		
-register of FIOH	1 210	590
-studies	1 100	

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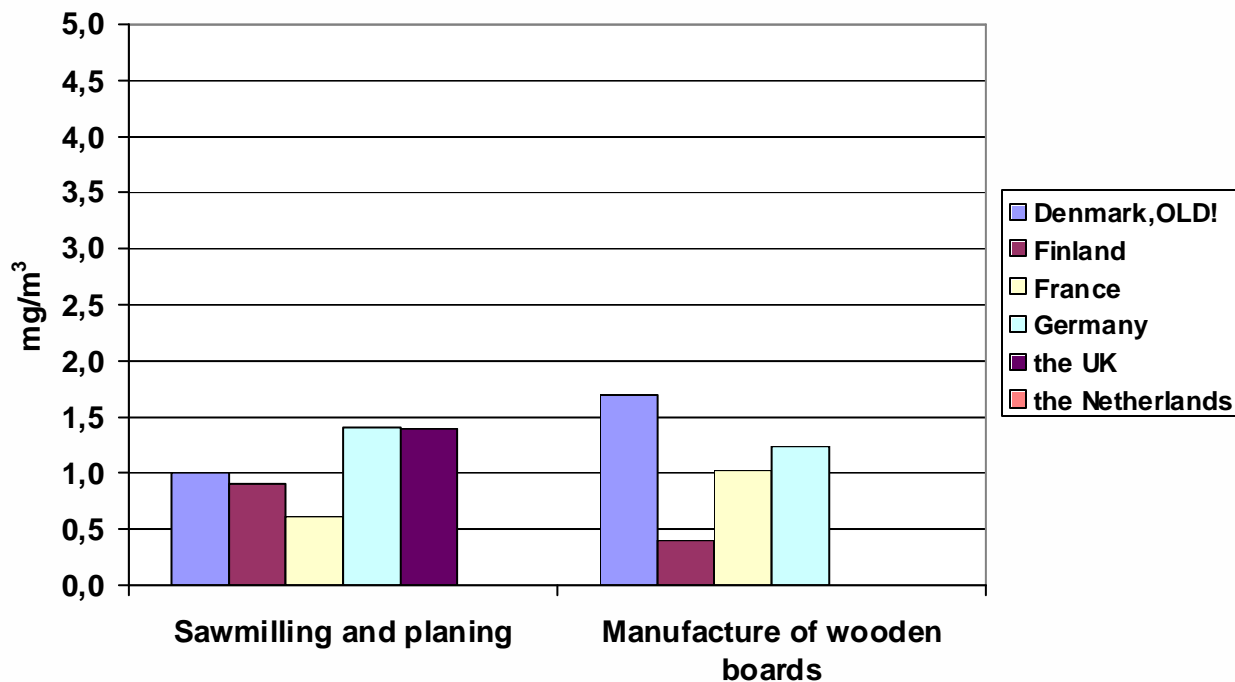


## Wood dust concentrations in Finland



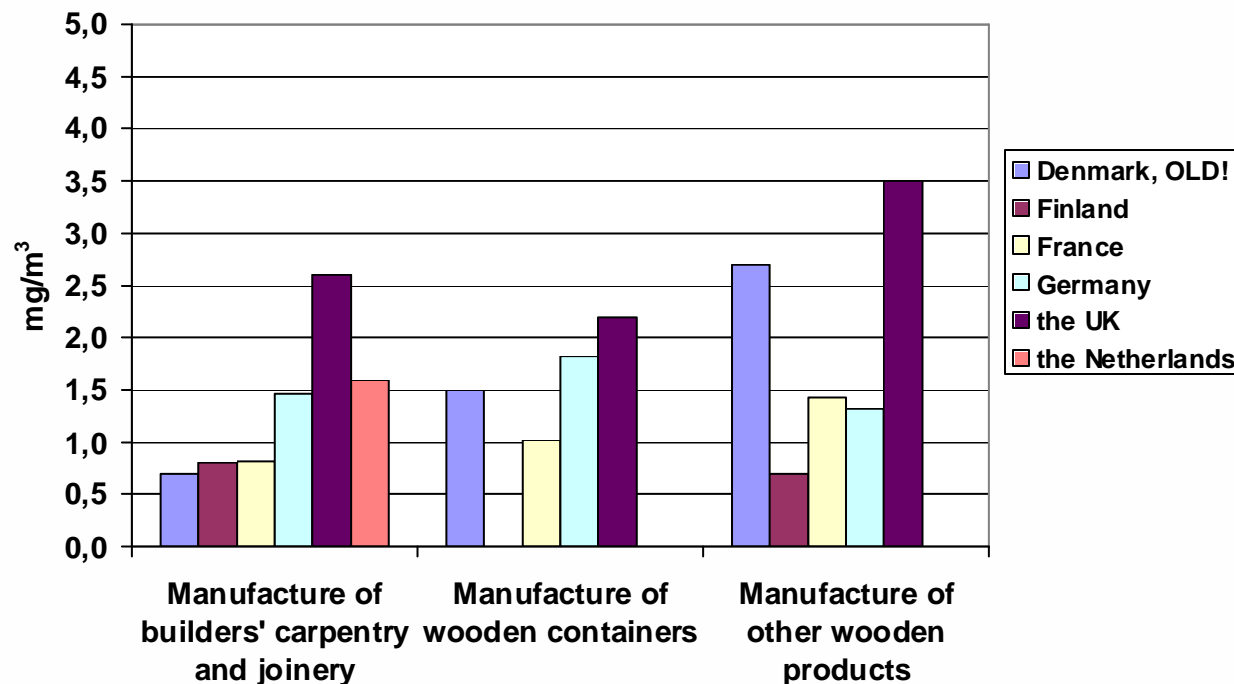


# Mean (GM) wood dust concentration by industry and country (1) (preliminary results)



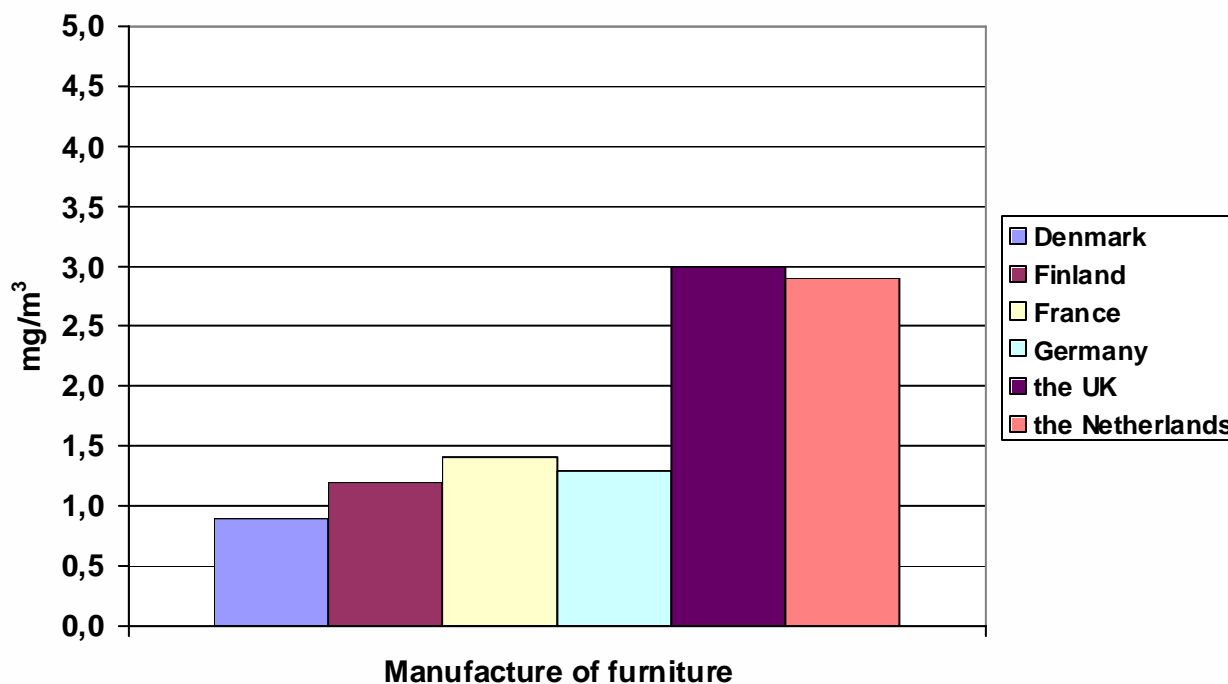


## Mean (GM) wood dust concentration by industry and country (2) (preliminary results)



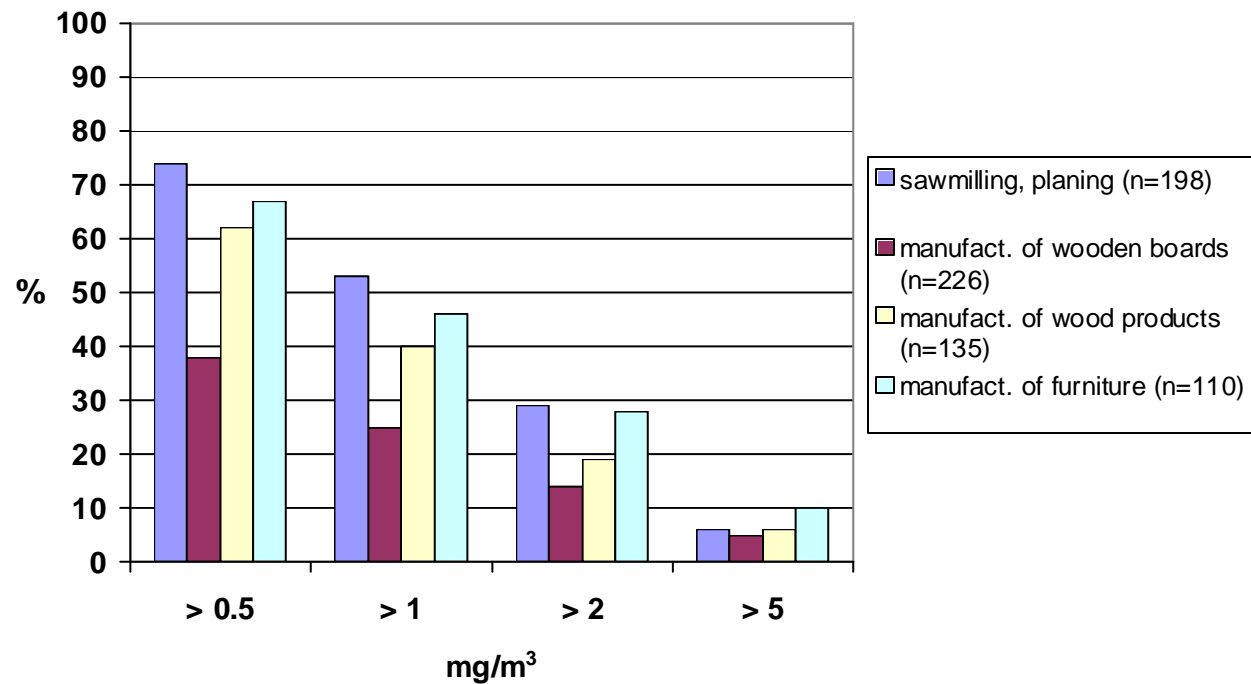


## Mean (GM) wood dust concentration by industry and country (3) (preliminary results)



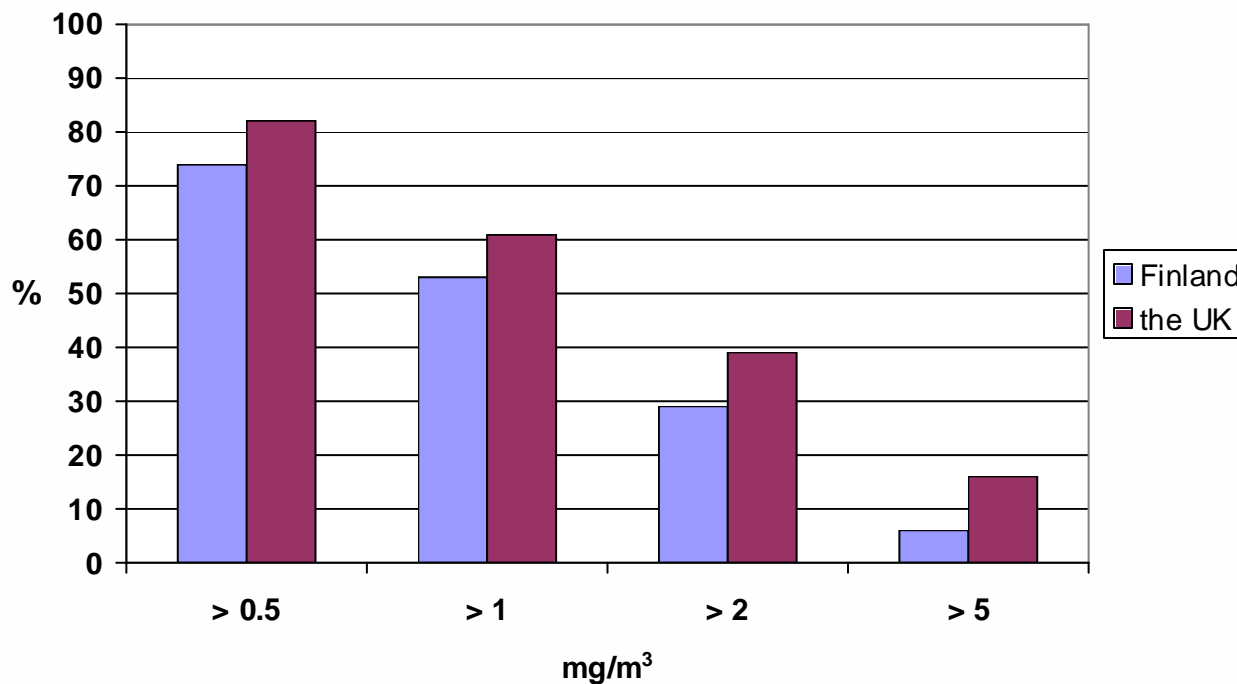


## Distribution of wood dust concentrations in Finland in 1990-2002



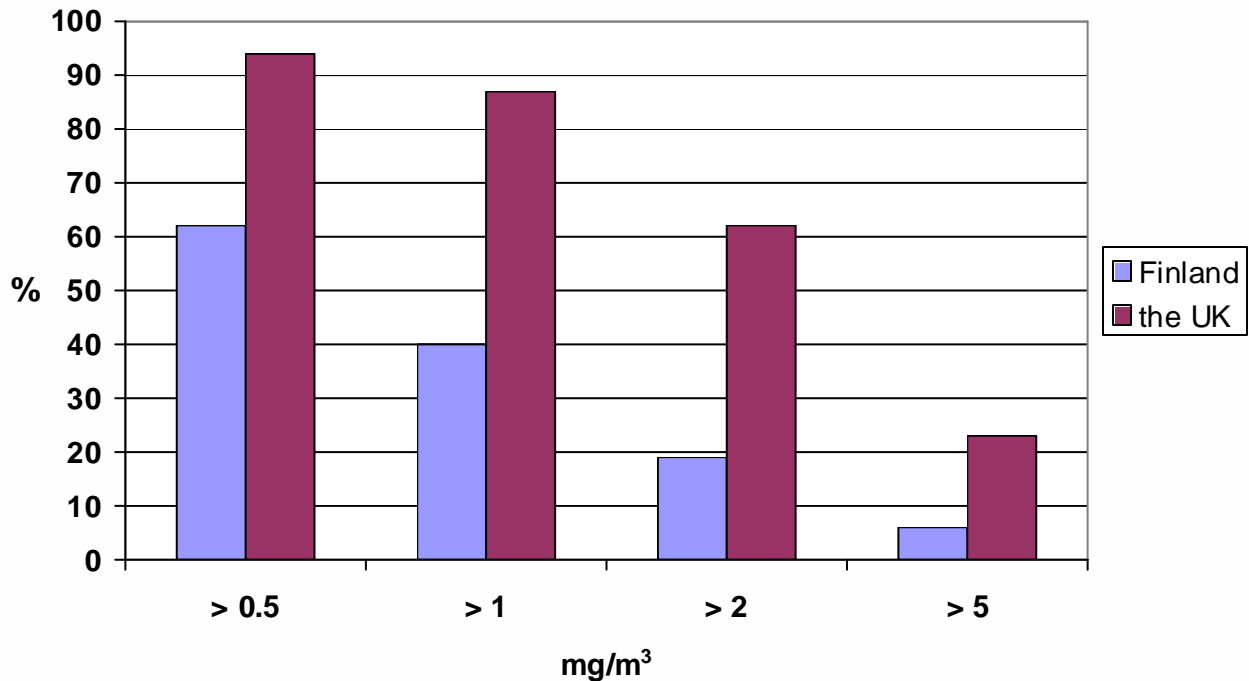


## Distribution of wood dust concentrations in sawmilling and planing



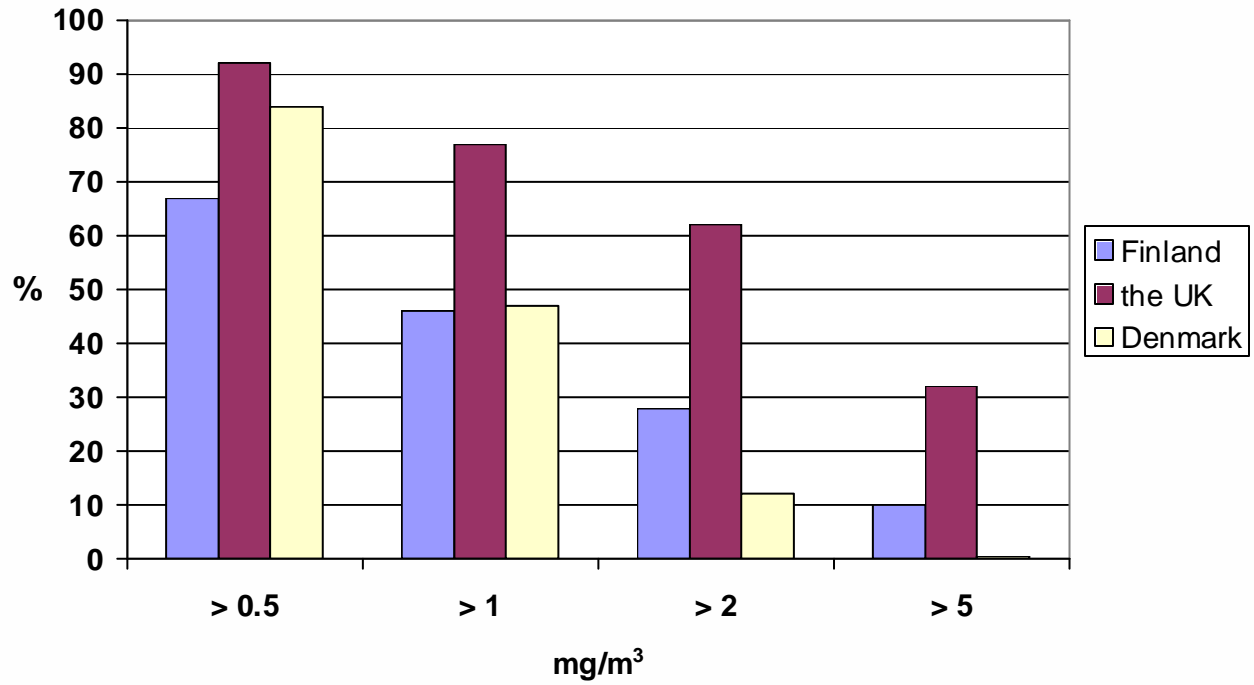


## Distribution of wood dust concentrations in manufacture of wooden products (203,204,205)





## Distribution of wood dust concentrations in manufacture of furniture





## Conclusions

- it seems that wood dust concentrations are lower now than in the beginning of 1990s
  - the mean (GM) concentrations vary between
    - 1 – 1.5 mg/m<sup>3</sup> in sawmilling, planing, and manufacture of wooden boards
    - 0.5 – 1.5 mg/m<sup>3</sup> in manufacture of wooden products, except in the UK (2 - 3.5 mg/m<sup>3</sup>)
    - 1 – 1.5 mg/m<sup>3</sup> in manufacture of furniture, except in the Netherlands and the UK (about 3 mg/m<sup>3</sup>)
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## Conclusions, continue

- 5 – 10 % of the wood dust measurements in Finland in 1990-2002 exceeded the occupational exposure limit of EU, 5 mg/m<sup>3</sup>
  - 15 – 30 % of the measurements in the UK in 1999-2000 exceeded the OEL
  - only 0.4 % of Danish measurements in furniture industry in 1997-1998 exceeded the OEL
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