

Preparation of Legal Reports: Exposure Assessment

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The 'Players'

- The Claimant
- The Defendant
- The Insurers
 - Solicitors
 - Barristers
 - Experts

In Cases of Occupational Ill Health the 'Expert Players' are usually:

- Medics
- Engineers (ha ha!)

Medical Opinion

- The action needs an injury!
- What is the injury (e.g. asthma, NIHL)
- Is it work related ?
- What might have caused it

Role of the Occupational Hygienist

- To assess relevant exposure
- Is it enough to cause the injury?
- Comment on controls (used or should have been)
- Does level of exposure indicate breach of duty?
 - COSHH / FA / Noise Regs
 - For the court to decide
 - Is any breach relevant to the case ?

An interesting example

- Job was replacing block paving along whole of walkway, Xylene based sealant to seal the sand base
- 7 Staff reported smells from a 'chemical spillage' office air contaminated for weeks
- Various personal 'injuries'
 - Skin irritation
 - Chest tightness
 - Conjunctivitis
 - Nausea
 - Headaches
 - An asthma attack



An interesting example

- Medics stated that symptoms were consistent with xylene exposure (as listed on MSDS)
- But only used hazard data, did not consider level of exposure
- Only 2 / 7 sought immediate help (GP /A&E). 'No follow up necessary'



An interesting example

- All routes of vapour ruled out except through the door
- Tests by consultants at ground level directly above freshly treated sand / blocks was 50 ppm
- Xylene detectable by odour \ll 1 ppm - lowest level of effects reported: 14 ppm
- V good ventilation in walkway
- In my view, very difficult to envisage ailments reported, given the likely level of exposure.
- Case discontinued



Role of Medics / Hygienists

- The medic looks at
 - health status of Claimant, defines the injury, is it work related, what might have caused it
- The hygienist looks at
 - The above, is there a link to the Claimants work, what might have caused it
- What is the level of exposure?
- High enough to cause such injury?

Another example

- Potato crisp factory
- Claim of occupational asthma
- Job involved removing blemishes from washed potatoes
- Claimant stated that dust levels were 'terrible' – 'couldn't see other side of factory'
- Engineer for Claimant asserted that dust levels were $>10 \text{ mg/m}^3$

Assessing Exposure

- Use existing data
- Acquiring data if the work is still happening
- Data from similar operations
- Own experience
- Evidence

- Issues
 - Qualitative v Quantitative
 - Reliability

Assessing Exposure - Existing Data

- Rare ! (especially if long latent period)
- If available
 - Reliable ?
 - Competently collected ?
 - Representative of Claimants work?
- If very old data
 - Static rather than personal?
 - Change in measurement / analytical technique / worker behaviour
 - ‘Dirty worker’

Assessing Exposure: Acquiring info if the work still takes place

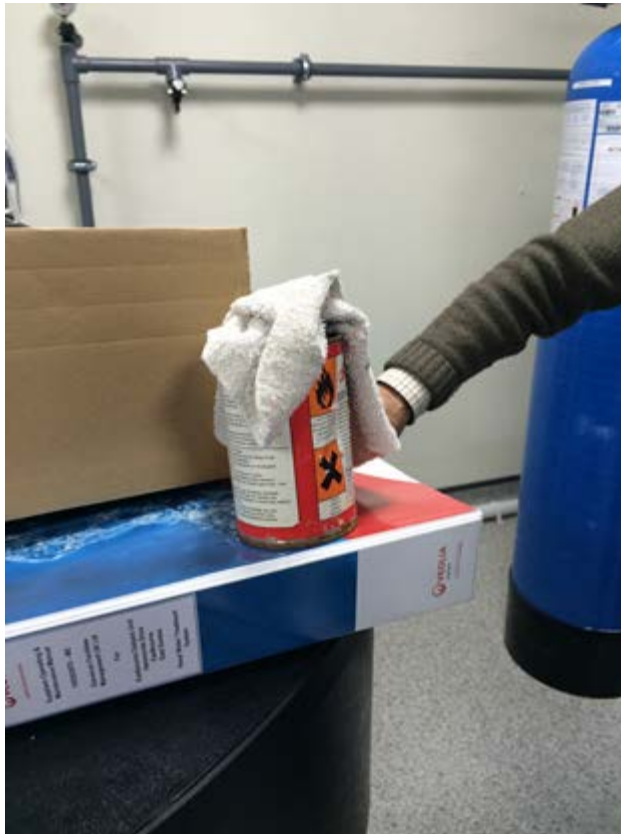
- Inspect the workplace
 - Observe / ask questions



Assessing Exposure: Acquiring info if the work still takes place

- Inspect the workplace
 - Observe / ask questions
- Conduct a survey
 - Apply usual aspects of good practice Solid strategy / sampling etc.
- Simulations
 - Representative?job, activity, conditions etc.
 - Ethics

Example: Solvent Exposure



Assessing Exposure:

Acquiring information from similar operations

- Industry Data
- HSE data
- Own experience ...how good is it ?
- Experience of others
- Both quantitative and qualitative

Plus ...as before....

- Is it reliable / representative of Claimants work?
- Change in measurement technique etc.

Assessing Exposure...

Evidence from other 'Players'

- The Claimantand their witnesses
- The Defendantand their witnesses
- Gather info on work and potential for exposure from
 - A visit (if the workplace is still there)
 - Interviews (If Claimant is still alive)
 - Statements
- Qualitative
- How reliable?

Assessing Exposure: Summary

- Carefully weigh up all information obtained
- Record the sources
- Give opinion and underling reasons
- May give a range of opinions depending on which evidence the court accepts
- Consider possible range of opinions from other hygienists

Epilogue

In spite of the numerous pressures it is a professional obligation to be independent and present a report which is accurate in terms of scientific and occupational hygiene veracity

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That's it folks !!

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