
The occupational history

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Occupational history

- Current job
 - Job title, employer, duration
 - Description of job tasks
 - Occupational exposures
 - Chemical, vapors, fumes
 - Physical: noise, radiation, heat
 - Biological
 - Psychological (stress, control)
 - Protective measures: personal protection (e.g., gloves, respirators); engineering controls (e.g. ventilation, lifting devices)
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Occupational history

- Previous jobs
 - May be relevant for chemicals with long half lives or that bioaccumulate (e.g. lead, some pesticides)
 - Conclusion: Is there potentially an exposure of concern? (not just the presence of a hazard but also the potential for exposure)
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Material safety data sheets (MSDS)

- Under OSHA Hazard Communication Standard and state right-to-know laws, employer must keep on file updated MSDS for all hazardous chemicals
 - Copies must be readily available to employee on request
 - Citizens also have access to MSDS (SARA)
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MSDS (cont)

- Chemical constituents of product named EXCEPT for those approved as "proprietary" or "trade secrets"
 - Physicians can gain access to trade secrets through a formal mechanism involving written justification and signing confidentiality agreement
 - In emergency, product supplier must provide information to physician or nurse by phone
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MSDS (cont)

- Information quality varies tremendously
 - Information notoriously limited
 - Cannot be trusted to supply information about reproductive hazards
 - Need to use alternative sources, once the chemical(s) is identified
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Reproductive and/or developmental toxicity databases

- TOXNET <http://toxnet.nlm.nih.gov/>
- Access to multiple databases, including Toxline, HSDB (Hazardous Substances Database), DART (Developmental and Reproductive Toxicology)
- REPROTOX
<http://www.healthywomen.org/resources/websites/dbweblinks/reprotox> (not complete)
- <http://www.ncbi.nlm.nih.gov/sites/entrez>



Reproductive and/or developmental toxicity databases (cont)

- TERIS (Teratogen information service)
Subscription required (lists 1300 teratogens)
- PubMed
<http://www.ncbi.nlm.nih.gov/sites/entrez>



The Problem

- Lack of reproductive and developmental toxicity data for most chemicals currently in use
- A fundamental flaw of chemical regulation
- Therefore, lack of evidence of harmful effects does not necessarily mean no risk



Approaches to occupational exposures

- Eliminate the hazard from the workplace
- Eliminate exposures by:
 - Engineering controls
 - Personal protective devices (last resort)
 - Other options



Approaches to occupational exposures (cont)

- Alternative work assignments
- Temporary leave
- Job security concerns!
- Do not hesitate to seek consultation; toxicologists, occupational health professionals

