What is Haz-Map?

Haz-Map is a relational database of hazardous chemicals and occupational diseases. It is designed for health and safety professionals and consumers seeking information about the health effects of exposure to chemicals and biological agents.

Haz-Map links occupational diseases to symptoms, hazardous job tasks, and jobs. It links hazardous agents to adverse effects, occupational diseases, industrial processes, and hobbies. It is part of a suite of toxicology and environmental health databases included in TOXNET® (toxnet.nlm.nih.gov).

Haz-Map Queries

As a relational database, Haz-Map can be queried to find all agents or diseases that match selected criteria. Users can find diseases by jobs and symptoms or find agents by processes and adverse effects. Also, users can browse by categories: hazardous agents (12 major categories and 287 minor categories), occupational diseases (12 categories), jobs (27 categories), job tasks (32 categories), processes (9 categories), and symptoms/findings (13 categories). Hazardous agents associated with 17 hobbies are covered under “Non-Occupational Activities”.

Haz-Map can be searched by keyword, agent, disease, or job from any page on the site. Agents can be chemical (e.g., formaldehyde) or biological (e.g., grain dust). Haz-Map shows diseases linked to each agent and agents linked to each disease. The main links in Haz-Map are between chemicals and occupational diseases in which causality has been established based on current scientific evidence. Currently more than 10,000 agents are included in the database.

Haz-Map offers a responsive Web design version. This version allows users to optimize the experience by adjusting each Web page to their device, whether it is a desktop computer or mobile touchscreen.

The information in Haz-Map comes from textbooks, peer-reviewed journal articles, Documentation of the Threshold Limit Values (published by ACGIH), and electronic databases such as NLMs Hazardous Substances Data Bank (HSDB®). Haz-Map information is regularly updated based on new editions of textbooks, periodic reviews of occupational medicine journal articles, and publications from ACGIH and IARC. The Glossary and References sections provide definitions of technical terms and bibliographies.

Sample Record

- Job Task Name: Remove lead coatings
- Comments: Lead poisoning; welding, cutting, brazing, grinding, sanding, or blasting of old paint (houses and buildings painted before 1978, bridges, water tanks, petroleum tanks, underground tanks, steel towers, and ships).
- Job Task Category: Removing Coatings
- Reference Link: Residential and commercial painters’ exposure to lead during surface preparation.
- Exposed To: Metals
- Related Information in Haz-Map:
  - Diseases: Diseases associated with this job task:
    - Birth defects
    - Chronic renal failure
    - Infertility, male
    - Lead, subacute toxic effect
    - Neuropathy, toxic
    - Spontaneous abortions
  - Jobs: Jobs associated with this job task:
    - Construction Craft Laborers
    - Construction Trades Workers, All Other
    - Craft Artists
    - Fine Artists, Including Painters, Sculptors & Illustrators
    - Grinding & Polishing Workers, Hand
    - Hazardous Materials Removal Workers
    - Maintenance & Repair Workers, General
    - Museum Technicians and Conservators
    - Painters, Construction & Maintenance
    - Painters, Transportation Equipment
    - Structural Metal Fabricators and Fitters
    - Welders, Cutters, Solderers & Brazers