



Spring House Worker Health Study

University of Minnesota

School of Public Health

Division of Environmental Health Sciences

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- One of four major divisions in the SPH
- Eclectic group of scientists from:
 - Epidemiology
 - Hygiene
 - Toxicology
 - Occupational Medicine
 - Occupational Health Nursing
 - Injury prevention
 - Biostatistics
 - Environmental chemistry
- Midwest Center for Occupational Safety and Health (NIOSH funded)

Investigators

- Bruce Alexander, PhD
 - Occupational epidemiologist
- Jeff Mandel, MD, MPH
 - Occupational physician, epidemiologist
- Gurumurthy Ramachandran, PhD
 - Industrial hygienist
- Girard Griggs
 - Doctoral student in industrial hygiene
- Tim Church, PhD
 - Biostatistician, epidemiologist
- Susan Gerberich, PhD
 - Director of Midwest Center for Occupational Safety and Health

Purpose of the Study

Overall

- To evaluate the potential health risks from occupational exposure in the Spring House facility

Specifically

- To determine whether Spring House workers have greater risk of death from certain diseases

Study Design: Cohort Mortality Study

Useful because:

- Almost all workers can be identified through company records.
- Almost all deaths can be identified through death certificates records
- Death certificates provide the cause of death.

Approach

- Identify all people who worked at the Spring House facility
 - Consider other eligibility criteria, e.g. minimum tenure
- Determine whether they are alive
- If deceased obtain the information on death certificates
 - Include underlying cause and contributing causes

Exposure Assessment

- Most critical and challenging piece of study
- Need to account for exposures over relevant time periods
 - Chemical agents
 - Physical agents

What we want in an exposure assessment.....

- For every employee for every day they worked
 - Type of chemical
 - Monitoring data for concentration of chemical (inhalation or dermal)
 - Duration of exposure
 - Actual dose

What we have.....

- Work histories
- Information on products and processes
- Some monitoring data
- Expert information
 - Industrial hygienists
 - Experienced workers
- Statistical models

Our Plan

- Start from the ground up
 - Assess information from previous study
 - Don't re-invent the wheel
 - Limit assumptions
 - Explore all available data
 - Have discussions with resident experts
 - Stakeholder representatives
 - Employees with relevant experience

Other Information

- All work is reviewed and approved by the University of Minnesota Human Subjects Committee
- Confidentiality of data with personal identifiers is guarded closely
- The University of Minnesota has the freedom to publish the results of the study
- Rohm and Haas has right to comment on final report



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