

Lifetime risk of injury and death in the construction industry: Chronic Disease

Risks of a lifetime in construction Part II: Chronic occupational diseases

*Knut Ringen, John Dement, Laura Welch, Xiuwen Sue Dong,
Eula Bingham and Patricia Quinn. American Journal of Industrial
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Overview

Using data collected between 1997 and 2010 from the Building Trades Medical Screening Program, researchers estimated lifetime risk of dust-related occupational lung disease, Chronic Obstructive Pulmonary Disease (COPD), and hearing loss. Researchers analyzed results from 12,742 chest x-rays, 12,679 breathing tests (spirometry), and 11,793 hearing tests to estimate the cumulative risk of occupational injury or fatality for a construction worker in the course of a 45-year career.

Key Findings

- Assuming a 45-year working life, the construction trades workers in the sample had a 16% probability of suffering COPD – double the risk suffered by their counterparts employed in the administrative/scientific/security control group. For some trades the risk was considerably higher: one-third of roofers who survived to age 85 could expect to develop COPD.
- Chest x-rays indicated that a construction worker has an 11% lifetime probability of parenchymal abnormalities associated with dust-related occupational lung diseases (pneumoconioses). This was nearly three times the risk experienced by the administrative/scientific/security control group (3.7%).
- Hearing tests with this group suggested that a construction worker with a 45-year career has a 73.8% probability of material hearing loss. The administrative/scientific/security control group had a significantly lower probability of hearing loss (43.4%).

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See abstract:

<http://bit.ly/1XtH4GL>

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