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 Medicine, November 2014.

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%).

For more information, contact:
Sue Dong: sdong@cpwr.com

See abstract:
http://bit.ly/1XtH4GL

 Production of this Key Finding was supported by Grant OH009762 from the National Institute for Occupational Safety and Health (NIOSH). The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH.

CPWR
THE CENTER FOR CONSTRUCTION
RESEARCH AND TRAINING
WWW.CPWR.COM