



The Impact of CPWR’s Building Trades National Medical Screening Program

Impact of Secondary Prevention on Mortality in the Building Trades National Medical Screening Program: Effectiveness of Occupational High-Risk Management [Open Access]

Knut Ringen, John Dement, Marianne Cloeren, Sammy Almashat, William Grier, Stella Hines, Laura Welch, Kim Cranford, Scott Haas, Anna Chen, Patricia Quinn, Miles Fisher. American Journal of Industrial Medicine. 2026.

Overview

This paper is one of the few published studies that assesses long-term occupational medical surveillance that extends beyond retirement age. The study focuses on the impact that the Building Trades National Medical Screening Program (BTMed) has had on its participants, encompassing the results from 25 years of long-term occupational medical surveillance. BTMed provides health examinations for workers employed in construction activities at U.S. Department of Energy nuclear weapons facilities; participants are eligible to receive an exam every three years. The study comprised 26,922 BTMed participants, the majority of whom were construction workers exposed to a range of hazards—including asbestos, radiation, and silica—during facility construction, maintenance, renovation, demolition, and cleanup (see next page). The study compares 23,452 BTMed participants who, as part of enrolling in the program, completed both a work history interview and a medical exam with 3,470 BTMed participants who completed only the work history interview.

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Read the article:

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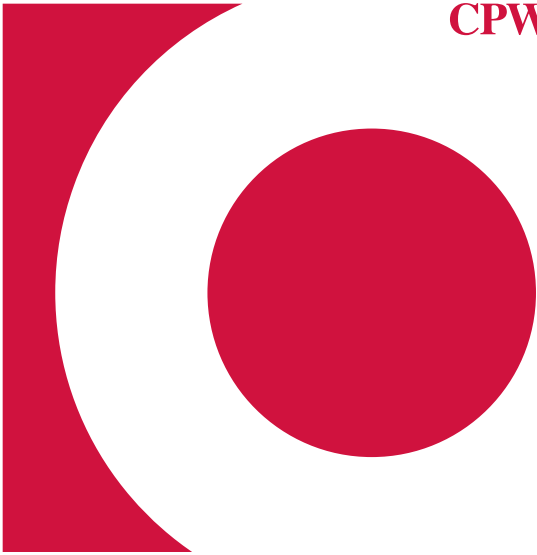
Key Findings

- BTMed has prevented an estimated 2,911 premature deaths, which translates to 1 in 8 participants.
- BTMed has added 35,178 years of life, an average of 1.5 years per participant.
- BTMed participants who completed a medical exam had a 28% lower risk of early death for all causes. This included a 27% reduction for all respiratory diseases, 37% for chronic obstructive pulmonary disease, 30% for cardiovascular disease, 32% for all cancers, 36% for lung cancer, and 53% for colorectal cancer.
- The cost per year of life saved was \$2,757, which is comparable to the most cost-effective public health initiatives, such as prenatal care.
- The more medical exams that a participant had, the greater the mortality risk was reduced. Compared with participants who did not have a medical exam, mortality risk was reduced 25% among participants with one exam, 28% among those with two exams, and 43% among those with three exams.
- This study indicates that secondary prevention in occupational high-risk groups is very effective, and continued surveillance beyond retirement age is important to reduce mortality.



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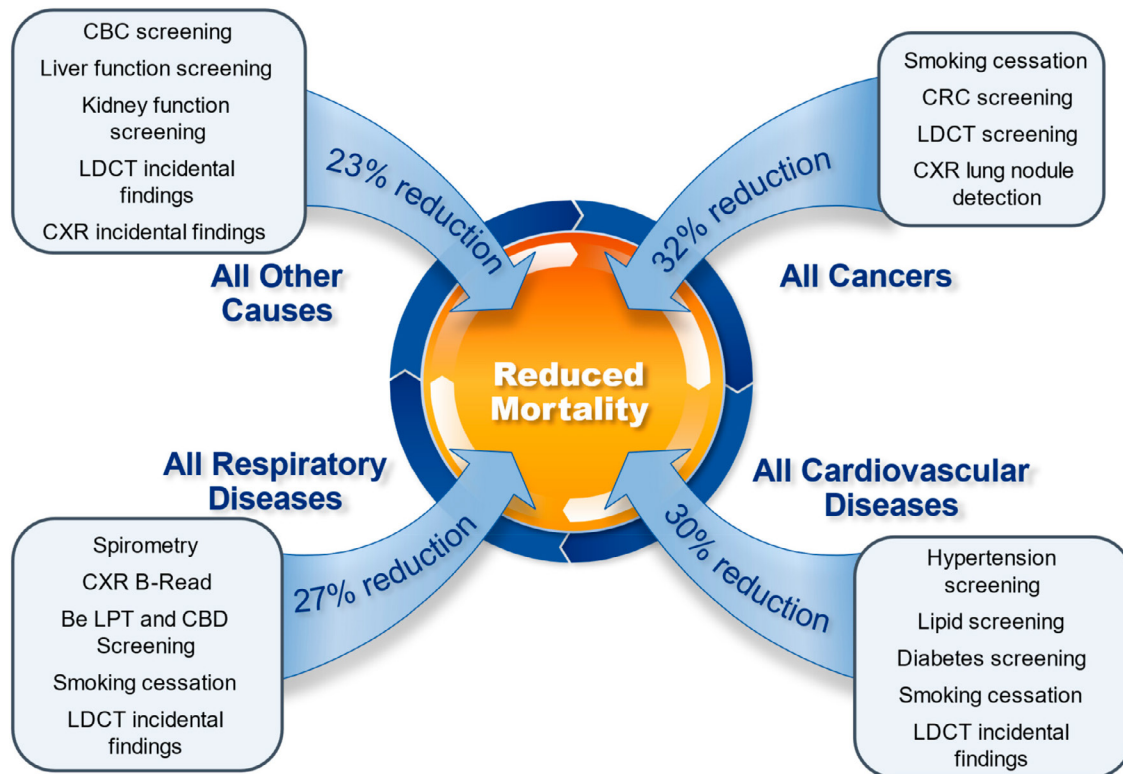


CPWR KEY FINDINGS FROM RESEARCH

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