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BRIEF REPORT

Colorectal Cancer (CRC) Screening in Occupational Health Surveillance Exams Is Associated With Decreased CRC Mortality

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ABSTRACT

Background: Colorectal cancer (CRC) screening is recommended for adults aged 45 to 75. Using data from a national screening program, we examined the impact of CRC screening in a population with occupational exposures.

Methods: Since 1998, the Building Trades National Medical Screening Program (BTMed) has offered CRC screening every 3 years. Tests used were: guaiac fecal occult blood test (gFOBT), 1998–2008; high sensitivity (HS)-gFOBT, 2009–2015; and fecal immunochemical test (FIT) since 2015. Data from the National Death Index through December 31, 2021 were used to compute standardized mortality ratios (SMRs) to compare the mortality experience of exam participants to nonparticipants. Internal analyses used Poisson regression and Cox regression to evaluation impact of CRC screening participation on CRC mortality.

Results: Participation in gFOBT was 68.2%; HS-gFOBT, 78.7%; and FIT, 85.9%. The SMR for CRC was significantly higher for BTMed exam nonparticipants (SMR = 2.04, 95% CI 1.40–2.86) than exam participants (SMR = 1.07, 95% CI 0.88–1.28). Impact of CRC screening participation on reducing CRC mortality by type of test was 2% for gFOBT, 12% for HS-FOBT, and 61% for FIT.

Discussion: This study found higher CRC screening participation than in the general population, with mortality reduction from screening similar to what is found in the general population, even though BTMed screening was conducted every 3 years rather than annually.

Conclusions: Participation in CRC screening had a significant impact on CRC mortality. Innovations in stool tests have led to greater convenience, participation, and impact, particularly for the FIT test. Occupational health practices should consider including CRC screening.

Institution at which the work was performed: CPWR – The Center for Construction Research and Training.