

RESPIRATORY DISEASE MORTALITY IN AGRICULTURAL WORKERS

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Agricultural workers have been shown to be at increased risk of developing respiratory diseases (RDs). Most mortality studies of agricultural workers to date have considered only crude mortality using underlying cause of death and may underestimate the public health importance of contributing causes of death. Furthermore, crude mortality data is a poor measure of premature mortality in the working-age population. Decedents noted as having worked in an agricultural industry were selected from national multiple cause of death data tapes for 14 states that had industry and occupation information for each of the years 1985-1987. To estimate the relative public health importance of specific RDs for these decedents, crude "cause of death" ratios (deaths due to a specified RD/total deaths from all RDs), years of working life lost (15-64 years) and years of potential life lost (age 15-life expectancy) were estimated for deaths where specific RDs were mentioned either as an underlying or contributing cause of death. Of the 81,317 decedents, 11,046 (14 percent) had a RD listed as an underlying cause of death while an additional 8,948 (11 percent) had a RD listed as a contributing cause. Of all RDs, respiratory neoplasms contributed most to the total years of working life lost (38 percent or 7,000 years), while pneumonia and influenza contributed the most to the total years of potential life lost (33 percent or 81,340 years). Calculations of premature mortality are useful in determining the relative public health importance of specific RDs on the working-age population in agriculture. Use of multiple causes of death data allows for an analysis of the maximum diagnostic information listed on death certificates.

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