Respiratory Abnormalities in Grain Handlers: A Clinical Physiologic and Immunologic Study.
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**Introduction:** The adverse effects of exposure to grain dust were described as early as 1715..

**Objectives** The purpose of this study was to determine the prevalence, nature and cause of respiratory disease among grain elevator operators. Particular emphasis was directed toward the possible role of immune mechanisms in the pathogenesis of the respiratory reaction to grain dust.

**Material and Methods:** 300 grain workers from 8 different companies operating in the Superior Duluth area (75% of the membership of the American Federation of Grain Millers). Nineteen percent of the workers had had episodes of grain fever. The prevalence of bronchitis was 37%. Wheezing on auscultation was 25%. Measurement of lung ventilatory function as well diffusing capacity correlated significantly with age and smoking habits, but not with length of employment. There was no correlation with fungi, bacteria, grain or grain dust antigens.

**Conclusions:** Exposure to grain dust can cause inflammatory reaction to the exposed mucosa, and it is highly possible that grain dust contributes, and in some case, causes chronic airway disease.