

## P4. Occupational Chronic Obstructive Pulmonary Disease

Ersin Nazlıcan, Mehmet Gökdeniz, Muhsin Akbaba  
cukurova university faculty of medicine, public health department

Chronic obstructive pulmonary disease (COPD) is a chronic disease characterized by progressive and irreversible obstructive pulmonary functional impairment. COPD, which is a common, preventable, and treatable disease in its early stages, is an important respiratory cause of mortality and morbidity worldwide. Therefore it is an important public health issue.

Although smoking is a leading risk factor for COPD, other factors can influence the development and progression of the disease. Occupational exposure is considered one of the risk factors for COPD and many studies have demonstrated its contribution to the development of COPD. In population-based studies, 15–20% of overall COPD was attributable to occupational exposure. There are some studies reporting the relationship between the risk of COPD and exposure to airborne irritants, including vapors, gases, dusts, fumes, fibers and mists (VGDFFiM).

Though limited evidence from population-based studies demonstrating incidence of spirometric-defined COPD in association with occupational respirable exposures there are considerable researches claim this association.

Mehta et al found that occupational exposures to biological dusts, mineral dusts, gases/fumes, and VGDF were associated with incidence of COPD of at least moderate severity in a Swiss cohort.

Würtz et al claimed that occupational organic dust exposure was associated to the prevalence of COPD in a Danish cohort.

Ryu et al suggested that exposure to vapors, gases, dusts, fumes was associated with a higher risk of COPD. In a study made by Marescaux et al, findings supported a positive impact of farm modernity on COPD prevalence in dairy farmers. Occupational and smoking-related risk factors were found to be of nearly the same magnitude.

Given these results the policy decisions are needed in order to reduce the chronic pulmonary diseases caused by occupational exposure of VDGFFiMs and furthermore better quantification studies are recommended.

**Keywords:** COPD, occupational disease, employee health