

UNIVERSITY OF VENDA

THE PREVALENCE OF WORK RELATED RESPIRATORY  
SIGNS AND SYMPTOMS AMONG MAINTENANCE AND  
TRANSPORT SECTION EMPLOYEES AT MAPULANENG  
HOSPITAL

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## **ABSTRACT**

### **The Prevalence of Work Related Respiratory Signs and Symptoms among Maintenance and Transport Employees at Mapulaneng Hospital in the Department of Health, Mpumalanga Province**

#### **Background and Introduction**

The prevalence of respiratory problems and its effects on the health of Mapulaneng transport and maintenance employees is not known. This is of special concern in the workshop area, where multiple hazardous dust particles and fumes are generated by different work activities in that area.

#### **Objective**

To determine the prevalence of work related respiratory signs and symptoms among transport and maintenance employees at Mapulaneng Hospital in 2009.

#### **Methodology**

An interviewer-administered questionnaire was administered to Mapulaneng transport and maintenance employees. Overall, 44 employees in maintenance and transport sections were included in the survey (**response rate 98%**). The prevalence and odds ratios were computed against 64 controls, who were derived from the general administrative employees of Mapulaneng Hospital. Controls with a history of respiratory related allergies, asthma (not work related) and past TB, were excluded in the final analyses.

#### **Results**

The prevalence of some work related respiratory signs and symptoms studied were significantly higher among Mapulaneng hospital maintenance and transport employees: excessive dryness of the nostrils (64%), itching of nasal mucosa (59%), excessive running (45%), sneezing (36%), coughing (55%), wheezing (20%), breathlessness (20%) and phlegm (27%). The effect of exposure in some of the signs and symptoms was more pronounced than, or of the same magnitude to that of smoking. Smoking as well as exposure indicated an advanced effect with regards to breathlessness, wheezing and phlegm.

#### **Conclusion**

The study mainly demonstrated an excess of work related respiratory symptoms among Mapulaneng Hospital maintenance and transport employees, which proved high and significant for transport section employees, an occupational group not traditionally associated with hazardous exposures. This increase might be associated with the hours spent by transport employees in the workshop area and are without protective clothing. The study also suggested that smoking was synergistic to breathlessness, wheezing and phlegm.