

# **A Study on the Occupational Lung Diseases**

## **– Standard Methods of Lung Function Test–**

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### **– Abstract–**

Lung function test can be influenced by technical methods, and the quality control of test has been stressed as an important part of lung function test program. This study was done to standard the performance of lung function test methods for workers' health examination in Korea.

Sixty Workers' Health Examination Institutes and 9 Pneumoconiosis Referral Centers were investigated for their lung function tester, types of spirometers, and performance of technicians.

Among surveyed Institutes, only 23 are performed lung function test, and only 39%(9/23) are performing any calibration of spirometers. Centers are all performed lung function test, and 100% are performing any calibration of spirometers, and most of those calibrations are done automatically by the machine. All the surveyed Institutes and Centers obtain acceptable tests no more than 2 times. The background of technicians include office workers and nurse aids without an adequate training in pulmonary physiology, and the testing posture and formats vary among Institutes and Centers. When the types of pulmonary dysfunction under the definition of the Ministry of Labor were compared between those obtained with and without quality control guidelines.

Quality Control(QC) program for spirometer or Quality Assurance(QA) program for technicians and doctors that diagnosis results of lung function tests was required,

also standard lung function test was needed.

This study was investigated institutes and centers to perform lung function test, and developed standard lung function test for Korean technicians and doctors depend on American Thoracic Society published in 1979, 1987, 1991, 1994.

**key words** : Standard lung function test, Quality control program, Quality assurance program