BRONCHUS AND LUNG CANCER INCIDENCE IN POPULATION LIVING AROUND THE FORMER URANIUM MAINING AND MILING SITES

Nina Chobanova1, Kremena Ivanova1, Zdenka Stojanowska2 and Trayan Atanasov1
1National Centre of Radiobiology and Radiation Protection, 3 Sv. Georgi Sofiiski St., Sofia1606, Bulgaria
2Faculty of Medical Sciences, Goce Delcev University, 10-AKrste Misirkovski, PO Box 201, Stip 2000, Republic of Macedonia
3Bulgarian National Cancer Register, Plovdivsko Pulec Str.6, Sofia, Bulgaria

*Corresponding author: n.chobanova@nrrp.org

The indoor radon concentrations and lung cancer incidence in Eleshnitza village and Blagoevgrad district of Bulgaria were examined in the study reported here. The Eleshnitza was the second largest uranium mining and milling region of the country. The geometric mean of indoor radon concentration in Eleshnitza (465 Bq/m³) was higher than the geometric mean of Blagoevgrad district (78 Bq/m³). Retrospective analyses on lung cancer incidence, covering the period 1995–2012 have been shown the same trend. The results were suggestive of an existing relationship between the two variables. Possible effects attributable to age and gender on lung cancer incidence were examined and found to be significant.