

Occupation and lung cancer risk in Leningrad province, Russia

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KEY WORDS

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SUMMARY

To investigate the association between occupation and lung cancer risk in Leningrad Province, Russia, we identified 540 pathologically diagnosed lung cancer cases (474 males and 66 females) and 582 controls (453 males and 129 females) from the 1993-1998 autopsy records of the 88 state hospitals of the Province. Lifetime occupational histories were obtained from personal records coded according to the standard Russian occupational classification system. Lung cancer risk was increased in workers in the manufacturing industry, particularly in the food industry and wholesale/retail trade and in the miscellaneous manufacturing industry. An increased risk was also found in subjects employed in chemical and metal production for 10 years or more. When we considered the association between specific occupations and lung cancer, waste incineration operators and loaders exhibited an excess risk that increased with employment duration. The present study, which is the first to evaluate the risk of lung cancer by occupation in Russia, suggests the presence in Leningrad Province of exposure in the workplace to lung carcinogens that require further characterization to develop targeted and effective preventive measures.