

**INTERNATIONAL SEMINAR ON
THE PROTECTION OF HOSPITAL WORKERS FROM
THE OCCUPATIONAL RISKS RELATED TO CARCINOGENS
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Cancer risk in the cohort of Slovenian nurses

At their work, nurses are exposed to numerous risk factors, some of which are carcinogens. Formaldehyde and ethylene oxide stand out among the chemical carcinogens, ionising radiation among the physical carcinogens and hepatitis B and C viruses among the biological ones. The largest number of studies refer to shift and night work, for which more and more evidence exists that these work patterns are a cause of breast cancer. A cohort study referring to the health condition of Slovenian nurses, which included more than 26,000 nurses and almost half a million personal monitoring years included all nurses who performed their work between 1997 and 2015 and revealed that the mortality rate of male and female nurses was lower than the mortality rate of a comparable Slovenian population. Furthermore, the cancer mortality rate of both genders was also lower. Standardised cancer incidence for both genders of nurses also shows no higher values; however, standardised breast cancer incidence in female nurses is 20 per cent higher than in the comparable Slovenian female population. The results comply with the results of other studies around the world demonstrating an increased risk of breast cancer among nurses. A comparison of the risk level with recent studies reveals a somewhat lower risk in our cohort, but this is due to the so-called exposure misclassification, which occurs when simultaneously considering nurses working night shifts and those not working at night. A higher standardised incidence in female nurses was also obtained for skin cancer and limit values for thyroid cancer.