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INDOOR RADOON MEASURMENT IN HOSPITALS AND HEALTH CENTRE, IN THIQAR GOVERNORATE (IRAQ) BY USING LR115 TYPE II (SSNTD)

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ABSTRACT

Exposure to natural sources of radiation, especially Radon and its short-lived daughter products has become an important issue throughout the world because sustained exposure of humans to indoor radon may cause lung cancer. Therefore, indoor radon concentration levels have been measured inside 57 government hospitals and health centers in Thiqar Governorate south of Iraq by using LR115 type II nuclear track detector. The radon concentration ranges from 39.4 to 157.8 Bq. m⁻³ with an average value of 95.5 Bq. m⁻³ and annual effective dose received by the human lunges varies from 0.68 to 2.72 mSv/y with an average value of 1.65 mSv/y. The Results show higher indoor radon levels and radon effective dose especially in hospitals as compared to other locations.

KEYWORDS: Annual Effective Dose, Indoor Radon, LR115 Type II, The Hospitals, PAEC