

# Oral Presentations

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## **The Risk of Ionizing Radiation Arising from Waste on Workers at Regions in Some landfills in West Bank**

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### **Abstract**

The study sample consists of 74 workers who were chosen randomly from different seven landfills in West Bank.

In this study, Gamma dose equivalent rate and Beta particles flux density were measured. In addition, the health parameters were measured to study the effect of ionizing radiation which arises from waste on landfill workers.

The measured Gamma dose equivalent rate ranged from 0.26 mSv/y to 3.50 mSv/y for all landfills. Two of the landfills have values above the international standard value which is 1 mSv/y. The measured Beta dose equivalent rate ranged from 0.01 mSv/y to 0.73 mSv/y for all landfills, which is below the international standard value.

Measurements of arterial blood pressure (systolic and diastolic), tympanic temperature, heart pulse rate and blood oxygen saturation showed a change before and after exposure to ionizing radiation, but this change is in the normal human range.