

Esposizioni occupazionali e fertilità maschile. Risultati di uno studio italiano multicentrico tra popolazioni esposte

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KEY WORDS

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SUMMARY

«Occupational exposures to toxic substances and male fertility. An Italian multicenter study conducted among exposed populations». It was believed that occupational exposure to several toxic agents could negatively affect male fertility. This paper reports the results of a study on the fertility of couples in whom the man was occupationally exposed to three different toxics: metals, solvents and pesticides, having effects on reproduction. Fertility was evaluated during the time that elapsed between attempting and achieving the first pregnancy of the couple (time to pregnancy - TTP). Exposure to occupational risks during the period preceding conception was defined on the basis of data collected from 153 workers of a mint (exposed to metal and solvents), 322 agricultural workers licensed to handle pesticides and 127 greenhouse workers. Comparing the groups exposed during the conception period with comparable non-exposed groups, we found a slight delay in conception among couples with male exposure to metals (OR=1.3; 95% CI 0.5-3.6), to solvents (OR=1.7; 95% CI 0.6-4.6) and to pesticides among greenhouse workers (OR=1.6; 95% CI 0.8-3.1 for the moderately exposed and OR=2.4; 95% CI 1.2-5.1 for the heavily exposed). No increase in the risk of conception delay was observed in agricultural workers with generic exposure to pesticides. The results of this study suggest that the workers exposed to metals and solvents and greenhouse workers exposed to pesticides experienced a delay in conception at the time of their wives' first pregnancy.

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