

The Effects of Fertilizer in the Workplace on Male Infertility: About Workers of Unit NPK in Complex Fertial Annaba

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Abstract : Inorganic fertilizers consist mainly of salts of ammonium nitrate, phosphate and potassium, the combination of primary nutrients NPK including secondary and micro nutrients are essential for plant growth, used for intensive agriculture, ranching, and horticultural crops, to increase soil fertility and ensure sustainable crop production. The manufacture of fertilizers is generally at a high temperature and high pressure, in the presence of several highly hazardous chemicals, dust and gases. These products are absorbed high in the airway, increasing the airway resistance thereby adversely affecting the pulmonary functions of workers. A study was conducted on 34 employees, especially exposed to nitrate derivatives. A questionnaire was prepared and distributed to all employees in the unit. The workers were divided into two groups according to age. Several hormonal parameters Assay were measured. The results of the questionnaire have detected a fertility problem, Concerning the hormones a significant reduction in the concentration of testosterone in both groups and LH in the group aged 30 to 40 year were noted compared to the control. However, an increase in the concentration of prolactin in both groups compared to the control. There was a significant decrease in FSH in the group aged 30 to 40 always in compared with the control group.

Keywords : fertilizers, healthy worker, risk, fertility

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