



INTRODUCTION

Agriculture in Mexico is a productive activity that allows the sustenance of 5.9 millions of workers and occupies a surface of 29.9 millions of hectares, of which 5.3 are irrigation ones and the rest are rainfed (INEGI). Agricultural work is generally performed by the population in biggest socioeconomical disadvantage and with minimal technological resources. The work risks and demands in agriculture are a complex problem to solve. The conditions under which the journey takes place may condition severely the health of agricultural laborers. The Excessive and strenuous work, long laboral journey, adverse thermal environments, management of excessive loads, as well as procedures that require awkward postures which are clearly not ergonomic. Therefore, such activity implies labor conditions that are harmful to their health.

OBJECTIVE

The objective of this research was to make an occupational health diagnosis to determine and characterize the labor risks and demands faced by agricultural laborers and to analyze the conditions in which they carry out the process of chili (*Capsicum annuum*) harvest, in the central south region of Chihuahua, Chih. México.

METHODS

Observational and descriptive study. A survey was applied collecting sociodemographical, labor and occupational health information, through routes to the work zones during the harvesting process, also taking glucose measurements from blood and in situ arterial pressure measurements.

RESULTS

Work process reconstruction allowed to identify conditions and risks such as: physical risks (exposure to higher than 39°C temperatures in work days of at least 8 hours), relative humidity higher than 80%, biological risks from exposition to insanitary conditions through the lack of bathrooms and poor personal hygiene practices; mechanical risks (bruises, lesions in hands and feet). Physiological demands, through repetitive work, forced postures, dynamic and static efforts, lifting and carrying of loads up to 60 kg.

Work Process Stage	Risks and Exigencies Detected	Probable Occupational Health Damage
Walking long distances to harvest fields	PHYSICAL (high or low temperatures) BIOLOGICAL (<i>Unhealthy conditions</i>) AND MECHANICS (impacts, falls, foot injuries)	Contusions, cuts, sprain, sun burns, infectious diseases, low back & joint pain, heat stroke, foot blisters.
Manual cropping of chili peppers	ERGONOMICS RISKS (forced positions, back and neck bending, high repeatability, monotony), MECHANIC , PHYSICAL , BIOLOGICAL .	Contusions, cuts, sprain, sun burns, infectious diseases, low back, neck & joint pain, injuries, tendinitis. And in the medium term musculoskeletal disorders (MSD)
Bag raise from the ground to shoulder level	PHYSICAL (heat, cold, solar radiation), CHEMICALS (dust particles) AND ERGONOMICS RISKS (forced positions, repeating movements, monotony.)	Skin burns, colds, heat stroke, asthma, back injuries, low back pain, disk hernia, stress, MSD.
Carrying and transporting of loaded bag	MECHANICS (falls, contusions), ERGONOMICS (heavy loads lifting, awkward posture), PHYSICALS (heat, cold, solar radiation), BIOLOGICAL (<i>Unhealthy conditions</i>).	Injuries, wounds, contusions, low back pain, knee pain, rheumatism, arthritis, tendinitis, MSD (musculoskeletal disorders).
Weighing and loading of bag onto the transporting truck	ERGONOMICS (Bending at the waist, twisting, lifting the bag over the shoulder level) PHYSICALS (heat, cold, solar radiation) AND MECHANIC (accidents, falls)	Low and high back pain, Disc & abdominal hernia, sun burns, contusions, cuts, sprains, etc.



DISCUSSION

The work conditions of the collectors involve risks and demands that severely damage their health. They are a highly vulnerable collectivity due to the poor nutrition, living and health conditions in which they are. The worker employer relationship is highly inequitable since workers in addition to receiving a paltry pay, lack social security and basic safety and hygiene conditions that they have the right to in accordance to the Federal Law of Labor.

LITERATURE

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