Natl. Acad. Sci. Lett. (January–February 2017) 40(1):1–3 DOI 10.1007/s40009-016-0478-5



SHORT COMMUNICATION

Health Hazards Among Workers of Agro-Processing Industries: An Exploratory Research in Punjab's Context

Indu Rawat¹ · N. K. Chhuneja² · L. P. Gite³ · M. S. Meena⁴

Received: 12 October 2014/Revised: 19 March 2016/Accepted: 22 March 2016/Published online: 6 April 2016 © The National Academy of Sciences, India 2016

Abstract Flour dust in Agro-Processing Industries (APIs) is one of the potential sources of health hazards among the workers. Hence, an investigation was undertaken in APIs of Punjab during 2012 to measure the dust particle size in small and medium sized mills run by the illiterate entrepreneurs. Data were solicited from purposively selected 15 Agro-Processing Centres (APCs) established and supported by Punjab Agricultural University, Ludhiana. A total of 120 workers engaged in these APCs responded for this study. Study reveals that Total Suspended Particulate (TSP) near all work stations was found higher than the recommended value of 0.5 mg/m³ as given by ACGIH. The highest TSP was observed 17.94 mg/m³ at hopper (wheat pouring station), much greater than American Conference of Governmental Industrial Hygienists (ACGIH) limit. Study shows the representative exa ple of

current Indian situation, where the recommended value exceeded tremendously. Hence, emission sources of the dust particulate should be given special attention. There is also need to undergo the pre-employment and periodic medical surveillance tests of workers which should be ensured by the employer. The personal protective measures like use of face mask, proper ventilation and reduced working hours in high dust concentration areas are strongly recommended.

 $\begin{tabular}{ll} \textbf{Keywords} & Agro-Processing Industries \cdot Dust \cdot \\ \textbf{Health hazards} \cdot \textbf{Workers} \\ \end{tabular}$

Indian food processing industry is the fifth largest industry in terms of production, consumption, export and growth. It employs 1.6 million workers. Workers' exposure to the