

Uso integrato di banche dati per la mappatura di lavorazioni con esposizione a cancerogeni nella Regione Piemonte: l'esempio della formaldeide

U. FALCONE, LUISELLA GILARDI, O. PASQUALINI*, S. SANTORO, ELENA COFFANO

DoRS – Centro di Documentazione per la Promozione della Salute della Regione Piemonte – ASL TO3, Grugliasco (TO)

* Servizio di Epidemiologia – ASL TO3, Grugliasco (TO)

KEY WORDS

Carcinogens; factual databases; formaldehyde

SUMMARY

«*Integrated use of data bases to map manufacturing processes involving exposure to carcinogens in the Piedmont Region: the example of formaldehyde*». **Background:** *Exposure to carcinogens is still widespread in working environments. For the purpose of defining priority of interventions, it is necessary to estimate the number and the geographic distribution of workers potentially exposed to carcinogens. It could therefore be useful to test the use of tools and information sources already available in order to map the distribution of exposure to carcinogens. Formaldehyde is suggested as an example of an occupational carcinogen in this study.* **Objectives:** *The study aimed at verifying and investigating the potential of 3 integrated databases: MATline, CAREX, and company databases resulting from occupational accident and disease claims (INAIL), in order to estimate the number of workers exposed to formaldehyde and map their distribution in the Piedmont Region.* **Methods:** *The list of manufacturing processes involving exposure to formaldehyde was sorted by MATline; for each process the number of firms and employees were obtained from the INAIL archives. By applying the prevalence of exposed workers obtained with CAREX, an estimate of exposure for each process was determined. A map of the distribution of employees associated with a specific process was produced using ArcView GIS software.* **Results:** *It was estimated that more than 13,000 employees are exposed to formaldehyde in the Piedmont Region. The manufacture of furniture was identified as the process with the highest number of workers exposed to formaldehyde (3,130), followed by metal workers (2,301 exposed) and synthetic resin processing (1,391 exposed).* **Conclusion:** *The results obtained from the integrated use of databases provide a basis for defining priority of preventive interventions required in the industrial processes involving exposure to carcinogens in the Piedmont Region.*