is integrated as Knowledge Transfer and Exchange (KTE) activities throughout the project.

**Results** A communication platform has been established. We expect that the results from the register study will highlight informal caregiving to children with mental disorders as a risk factor for stress-related outcomes, including excess mental health problems, sick leave from work, loss of income, and change in employment status. We hope to identify psychosocial factors mitigating these associations as well as specific occupational groups as potential targets for interventions.

**Conclusions** Insights from this study will be integrated in further work and KTE activities to develop interventions improving management and support of informal caregivers at work.

### Noise

**P-158 DEAFNESS AND FITNESS FOR WORK**


10.1136/OEM-2023-EPICOH.102

**Introduction** There are many occupational sectors where noise is excessive. Employees with a hearing impairment (HAI) are the most vulnerable, as it may lead to unfitness for work. Keeping people with an HAI in the workplace is a necessity.

**Objective** To determine the socio-professional characteristics of patients with hearing impairment.

To study the impact of hearing impairment on the patient's medical fitness to work

**Methods** Retrospective cross-sectional study which had interested patients with HAI who consulted the Occupational Medicine department at Charles Nicolle Hospital over a six-year period from January 2016 to November 2022.

**Results** One hundred and fifty-one patients with HAI consulted our department. The mean age was 43.47 ± 9.38 years. The predominance of males was noted in 70.9% of cases. ENT pathologies were found in 15.2% of the patients. Perforation of the tympanum (n=7), otosclerosis (n=4), chronic otitis media (n=4), and congenital sensorineural deafness (n=3). The most common professional sectors were telecommunications (27.8%), food processing (11.3%), transport (8.6%), construction, and public works (8.6%). The jobs most occupied by the patients were manual workers (31.8%), teleconsultants (28.5%), drivers (8.6%), and machine operators (7.3%). The average professional seniority varied between 1 and 38 years. The patients suffered from sensorineural (76.8%), mixed (16.6%), and conductive (11.9%) hearing loss. The patients benefited from avoidance of exposure to lesion noise (69.5%), telephone calls (26.7%), safety posts (17.4%), and professional driving (8.9%). Reinforcement of personal protective equipment was indicated in 8.3% of cases. A declaration of the deafness as being of professional origin was done in 25.2% of cases.

**Conclusion** According to our studies, there are several workplaces that are not suitable when deafness is present. Therefore, early detection of these pathologies as well as the reinforcement of individual and collective protection equipment is necessary.

### Respiratory effects/Diseases

**P-160 COMPARISON OF OCCUPATIONAL ASTHMA CHARACTERISTICS RELATED TO HIGH AND LOW MOLECULAR WEIGHT AGENTS**


10.1136/OEM-2023-EPICOH.103

**Introduction** Occupational asthma (OA) is one of the major occupational health problems given its high prevalence and significant socio-economic impact. Several studies have focused on analyzing the differences between irritant-induced asthma and allergen-induced asthma, but few researchers have evaluated the impact of the molecular weight of allergens on asthma phenotype.

**Objective** To describe the socio-professional characteristics of individuals with OA caused by low molecular weight agents (LMW) and those with OA caused by high molecular weight agents (HMW).

**Methods** Between 2016 and 2022, a cross-sectional descriptive study was conducted among asthmatic workers referred to the occupational medicine department of Charles Nicolle Hospital in Tunis for diagnostic and etiological exploration. Socio-professional data were collected from medical records. We have focused on the agents' nature to which each was exposed in the course of his work to obtain two study groups A group of workers with asthma due to an LMW (G1) and a group of workers with asthma due to an HMW (G2). The analysis of the data was compared between the two groups.

**Results** A total of 51 workers were included (G1=42; G2=9). The mean age was 47.78 ± 9.2 years (G1=49.7 ± 8.8 years; G2=42.7 ± 8.3 years) with a female predominance in both groups (G1=56.8%; G2=71.4%). The mean occupational seniority was 21.33 ± 9 years (G1=23.3 ± 9.1 years; G2=18.7 ± 8.3 years). The average time between the onset of the first symptoms and the start of labor was G1=13.27 ± 9.8 years and G2 8.38 ± 6.48 years. The most registered LMW agents were isocyanates (32.4%) and formaldehyde (27%). The most observed HMW agents were vegetable textile dust (78.6%).

**Conclusion** More large-scale studies are planned to analyze whether patients with (OA) caused by LMW agents differed from patients with OA caused by HMW with regard to risk factors, asthma presentation, and severity.

### Noise

**P-165 CAN ACOUSTIC TRAUMA BE CONSIDERED AN ACCIDENT AT WORKPLACE?**


10.1136/OEM-2023-EPICOH.104

**Introduction** Acoustic trauma exists in the workplace and its evolution can be spontaneously favorable as well as serious.