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The Correlation Between Occupational Exposure and the Incidence of Long COVID Syndrome: Analysis of the COVICAT Cohort

A recent population-based study, conducted in Spain and published in *BMJ Occupational & Environmental Medicine*, investigated the impact of occupational factors on the risk of developing Long COVID. The research analyzed data from the COVICAT cohort (Catalonia), following a sample of 2,054 employed adults, aged 40 to 69, between 2020 and 2023. All subjects had a confirmed SARS-CoV-2 infection.

The incidence of Long COVID, defined as the persistence of symptoms for at least three months post-infection, was identified in 23.7% of the participants.

Risk Factor Analysis Although the study reconfirmed the association of certain individual factors (female sex, obesity, multiple comorbidities, and severity of the initial infection) with an increased risk of post-COVID sequelae, the occupational environment was identified as an independent and statistically significant determinant.

Key statistical findings include:

- **General Occupational Risk:** Workers in sectors classified as having a high risk of exposure showed a **44%** higher probability of developing Long COVID compared to those in low-risk sectors.
- Specific Working Conditions:
  - On-site work (as opposed to teleworking) was associated with a **57%** increase in risk.
  - Inconsistent or limited use of respiratory protective equipment (high-filtration respirators) correlated with a **52%** higher risk.
  - Regular commuting via public transport increased the risk by **58%**.

Vulnerable Sectors and Protective Factors The most affected professional categories were healthcare and social care workers, teachers, retail workers, transport workers, and security personnel, reflecting the impact of prolonged interpersonal contact and the inability to maintain physical distance.

In contrast, factors associated with a reduced incidence of the syndrome included vaccination prior to infection, infection during the period of Omicron variant dominance, and older age.

Public Health Implications The study authors, including Dr. Manolis Kogevinas (ISGlobal Barcelona Institute for Global Health), emphasize that occupational factors are modifiable. Therefore, a significant proportion of the burden associated with Long COVID could be prevented through targeted strategies. The study advocates for the official recognition of Long COVID as an occupational disease for exposed categories.

Given that occupational exposure represents a modifiable risk factor, the implementation of rigorous workplace protection measures (consistent use of protective equipment, ventilation, and distancing) and the recognition of this risk in public health policies are essential for reducing the incidence of Long COVID among the active population.

Translated and adapted from LAINE BERGSOM, December 18, 2025.