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13 - DOES THE NEW EUROPEAN UNION AIR QUALITY DIRECTIVE REALLY PROTECT HEALTH? A NATIONWIDE CASE STUDY IN SPAIN

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Resumen

Background/Objectives: In October 2024, the European Union (EU) issued a Directive establishing a series of limit values, which, once transposed into national law by EU Member States, will become mandatory. This Directive is less restrictive than the WHO guideline values published in 2021.

Methods: Using dose-response functions specifically calculated for every Spanish province, this study sought to ascertain how many short-term, all-cause hospital emergency admissions (ICD-9: 1-799 and ICD-10: A00-R99) were attributable to NO2, PM10 and PM2,5 concentrations across the period 2013-2018, and what the ensuing reduction in admissions would be, if the EU Directive and WHO guideline values were applied respectively.

Results: The results obtained indicate that here in Spain some 38,790 admissions per year are attributable to NO2, PM10 and PM2,5pollution, at a total cost of €548 million. These admissions would be reduced by 478 (1.23%) if the EU Directive were observed, and by 4,496 (11.59%) if the WHO guideline values were met.

Conclusions/Recommendations: While compliance with the EU limit values would have almost no effect in terms of a decrease in attributable admissions, such an effect would indeed be seen in the event of compliance with the WHO guideline values and would entail a saving of over €63 million nationwide. This study only focused on short-term effects of PM and NO2.

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