

Impact of large industrial emission sources on mortality and morbidity in Chile: A small-areas study

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© 2016 Elsevier Ltd. Chile suffers significant pollution from large industrial emitters associated with the mining, metal processing, paper production, and energy industries. The aim of this research was to determine whether the presence of large industrial facilities (i.e. coal- and oil-fired power plants, pulp and paper mills, mining facilities, and smelters) affects mortality and morbidity rates in Chile. For this, we conducted an ecological study that used Chilean communes as small-area observation units to assess mortality and morbidity. Public databases provided information on large pollution sources relevant to Chile. The large sources studied were oil- and coal-fired power plants, copper smelters, pulp and paper mills, and large mining facilities. Large sources were filtered by first year of production, type of process, and size. Mortality and morbidity data were acquired from public national databases, with morbidity being estimated from hospitalization records. Cause-specific