



Corrigendum: Covid-19 Lockdown in Spring 2020 in France Provided Unexpected Opportunity to Assess Health Impacts of Falls in Air Pollution

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A Corrigendum on

Covid-19 Lockdown in Spring 2020 in France Provided Unexpected Opportunity to Assess Health Impacts of Falls in Air Pollution

by Adélaïde, L., Medina, S., Wagner, V., de Crouy-Chanel, P., Real, E., Colette, A., Couvidat, F., Bessagnet, B., Alter, M., Durou, A., Host, S., Hulin, M., Corso, M., and Pascal, M. (2021). *Front. Sustain. Cities* 3:643821. doi: 10.3389/frsc.2021.643821

In the original article, there was a wording error on the way that the reduction percentages of air pollutant concentrations were expressed. It is not a reduction percentage but a percentage of increase that would have been observed in the absence of lockdown.

A correction has been made to **Discussion**, “**Summary of Findings**,” **first paragraph**:

We replaced the following sentences: “The mean reduction in PM₁₀ concentrations was 8.3%, with values ranging from –1.8 to 39.8% depending on the municipality. For NO₂ concentrations, the mean reduction was 29.0%, with values ranging from 3.5 to 187.8% depending on the municipality.” by:

“The daily mean difference between the estimated PM₁₀ level during lockdown and its reference (modeled concentrations without lockdown) was –8.3 μg.m^{–3}. This difference was –2.1 μg.m^{–3} for NO₂.”

In the original article, there was a mistake in **Table 2** as published. The four columns entitled “Reduction percentage” were not defined. The corrected **Table 2** appears below.

The authors apologize for these errors and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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TABLE 2 | Daily mean differences [min; max] by period, pollutant and area in France from March 16 to June 22, 2020, and from July 1, 2019 to June 30, 2020.

	Strict Lockdown (A) (March 16 to May 11, 2020)		Gradual lifting (B) (May 11 to June 22, 2020)		Total period (A+B) (March 16 to June 22, 2020)		Annual (July 1, 2019 to June 30, 2020)	
	Daily mean differences* [min; max] ($\mu\text{g.m}^{-3}$)	Relative differences** [min; max] (%)	Daily mean differences* [min; max] ($\mu\text{g.m}^{-3}$)	Relative differences** [min; max] (%)	Daily mean differences* [min; max] ($\mu\text{g.m}^{-3}$)	Relative differences** [min; max] (%)	Daily mean differences* [min; max] ($\mu\text{g.m}^{-3}$)	Relative differences** [min; max] (%)
PM₁₀								
Rural areas***	−2.4 [−4.9; −0.1]	12.4 [−1.1; 29.0]	−0.4 [−1.6; 0.6]	2.9 [−5.4; 11.0]	−1.5 [−3.2; 0.1]	8.3 [−1.8; 19.5]	/****	/
Sparsely populated urban areas***	−2.4 [−4.6; −0.1]	12.3 [−0.2; 26.1]	−0.4 [−1.3; 0.4]	2.7 [−3.9; 9.2]	−1.5 [−3.0; 0.1]	8.1 [−1.8; 16.9]	/	/
Populated urban areas***	−2.4 [−4.7; −0.1]	12.4 [−0.2; 25.7]	−0.4 [−1.4; 0.4]	2.5 [−3.9; 9.7]	−1.5 [−3.0; 0.1]	8.1 [−1.8; 16.6]	/	/
Highly populated urban areas***	−2.7 [−8.6; −0.1]	13.1 [−0.6; 44.9]	−0.4 [−4.4; 0.7]	2.5 [−7.1; 33.1]	−1.7 [−6.7; 0.1]	8.5 [−1.7; 39.8]	/	/
Metropolitan France	−2.4 [−8.6; −0.1]	12.5 [−1.1; 44.9]	−0.4 [−4.4; 0.7]	2.8 [−7.1; 33.1]	−1.5 [−6.7; 0.1]	8.3 [−1.8; 39.8]	/	/
NO₂								
Rural areas	−3.0 [−12.8; −0.3]	43.5 [6.9; 181.2]	−0.5 [−5.6; 0.1]	8.1 [−1.6; 99.1]	−1.9 [−8.7; −0.2]	28.1 [3.5; 121.7]	−0.5 [−2.3; −0.04]	7.6 [1.0; 32.9]
Sparsely populated urban areas	−3.5 [−11.8; −0.3]	48.1 [7.7; 122.2]	−0.6 [−4.8; 0.1]	9.2 [−1.0; 78.5]	−2.3 [−8.3; −0.2]	31.2 [4.4; 97.8]	−0.6 [−2.2; −0.05]	8.4 [1.2; 26.4]
Populated urban areas	−3.8 [−10.7; −0.9]	49.7 [15.2; 127.8]	−0.7 [−3.6; 0.04]	9.5 [−0.8; 43.0]	−2.5 [−7.6; −0.6]	32.2 [9.6; 89.9]	−0.7 [−2.1; −0.2]	8.7 [2.6; 24.3]
Highly populated urban areas	−5.1 [−30.8; −1.3]	52.7 [21.4; 214.8]	−1.0 [−19.6; −0.04]	11.3 [−0.2; 150.3]	−3.3 [−25.9; −0.8]	34.7 [13.7; 186.8]	−0.9 [−7.0; −0.2]	9.4 [3.7; 50.5]
Metropolitan France	−3.2 [−30.8; −0.3]	44.7 [6.9; 214.8]	−0.6 [−19.6; 0.1]	8.4 [−1.6; 150.3]	−2.1 [−25.9; −0.2]	29.0 [3.5; 187.8]	−0.6 [−7.0; −0.04]	7.8 [1.0; 50.5]
PM_{2.5}								
Rural areas	/	/	/	/	/	/	−0.3 [−0.6; 0.01]	2.4 [−0.6; 5.3]
Sparsely populated urban areas	/	/	/	/	/	/	−0.3 [−0.6; 0.01]	2.3 [−0.6; 4.5]
Populated urban areas	/	/	/	/	/	/	−0.3 [−0.6; 0.01]	2.3 [−0.6; 4.4]
Highly populated urban areas	/	/	/	/	/	/	−0.3 [−0.9; 0.002]	2.4 [−0.5; 8.9]
Metropolitan France	/	/	/	/	/	/	−0.3 [−0.9; 0.01]	2.4 [−0.6; 8.9]

*Absolute differences between the levels during lockdown and the reference (modeled concentrations without lockdown).

**Percentage of change (taken as negative for a decrease) modeled in the absence of lockdown.

***Rural areas: <2,000 inhabitants; Sparsely populated urban areas: areas belonging to urban units of 2,000–20,000 inhabitants; Populated urban areas: areas belonging to urban units of 20,000–100,000 inhabitants; Highly populated urban areas: areas belonging to urban units of more than 100,000 inhabitants.

****Values not used for the QHIA are not shown in this table but are available.