

AMBIENT AIR POLLUTION :

CHALLENGES FOR PUBLIC HEALTH TODAY AND LEARNINGS FROM THE SPRING 2020 LOCKDOWN IN FRANCE



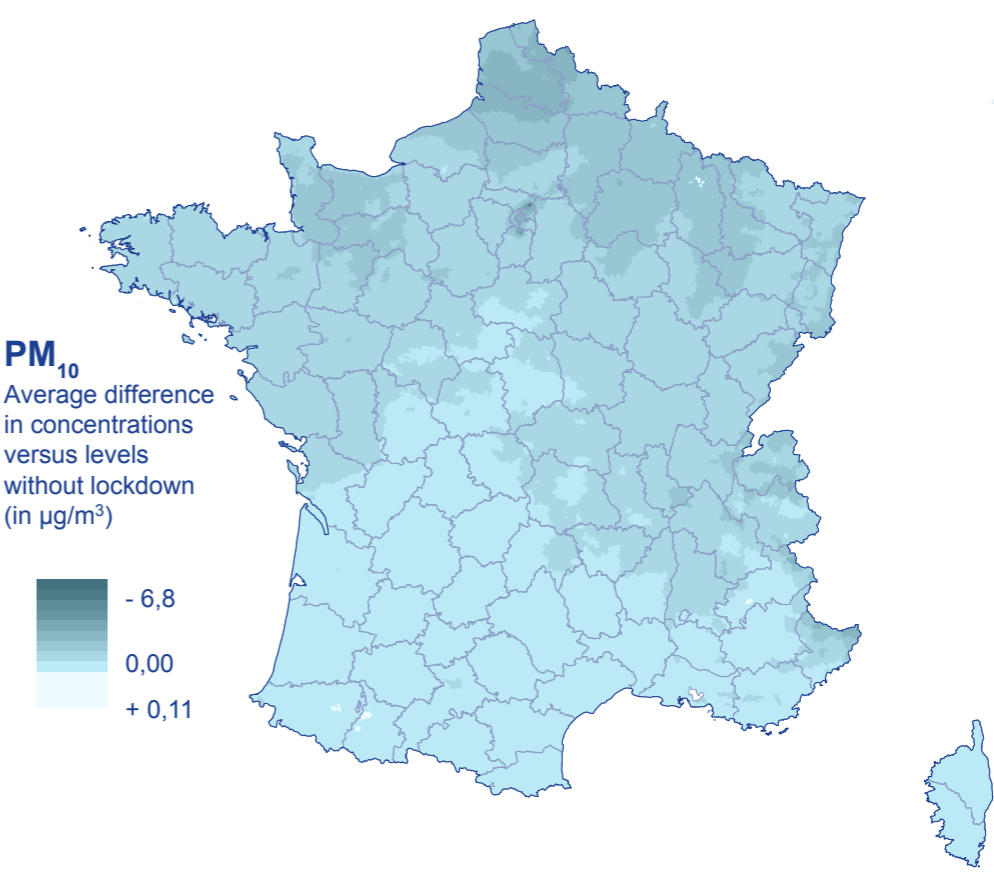
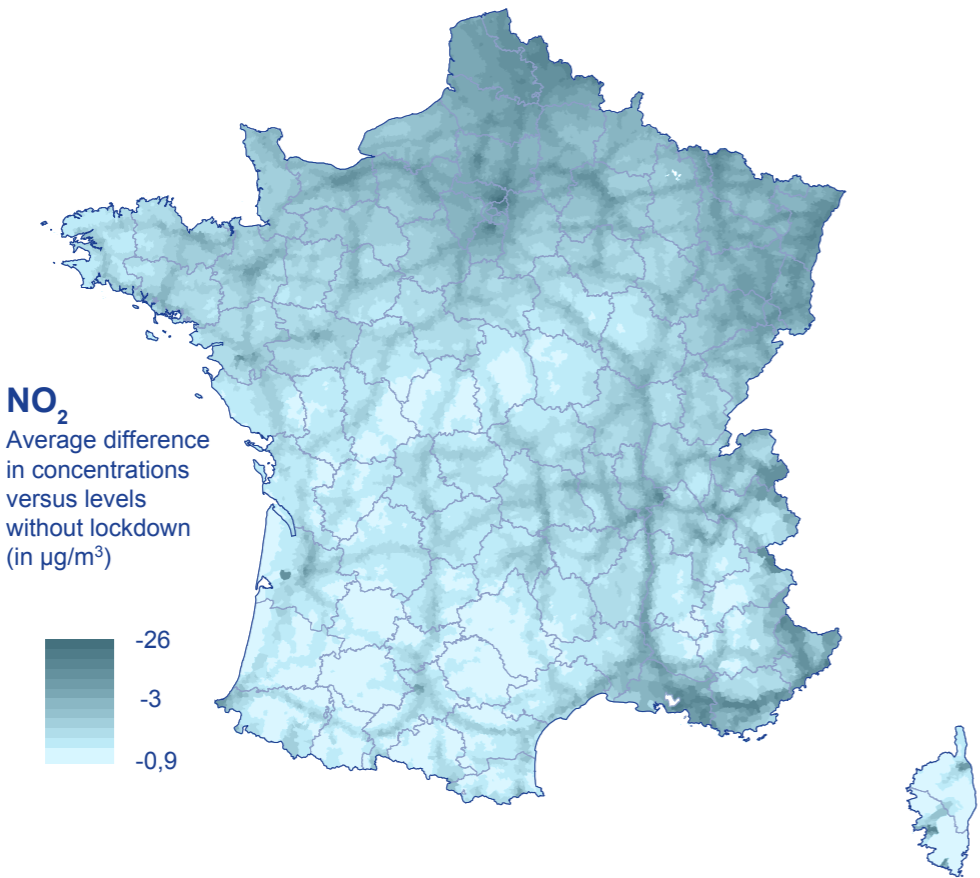
Santé
publique
France

Source : Santé publique France, report and executive summary: Impact of ambient air pollution on mortality in metropolitan France associated with Spring 2020 lockdown, and new data on total burden for 2016-2019
Report available at: www.santepubliquefrance.fr

Decreases in ambient-air pollution and associated mortality **were observed during the first** French lockdown in Spring 2020.

The decrease was primarily related to a **fall in concentrations of nitrogen oxides** (including NO₂), mainly from road traffic.

Decreases are smaller for particulate matter (PM) coming from multiple emission sources. Even if the lockdown reduced industrial and vehicular emissions, it had little if any effect on sources such as heating and springtime farm spraying.



1200

estimated lives saved associated with decreased exposure of the population to nitrogen dioxide (NO₂) during the first lockdown

2300

estimated lives saved associated with decreased exposure of the population to PM₁₀ and PM_{2.5} particles during the first lockdown

Source for map data: ADMIN-EXPRESS - Ign, 2018 ; Ineris, Chimère, données redressées tenant compte de la réduction des émissions pendant le confinement (data adjusted for emission reductions during the lockdown)

In the long term, mortality associated with ambient air pollution remains a significant risk factor in France, hence the need to continue efforts to reduce all sources of air pollution

For the years 2016-2019:

40 000 deaths

each year among persons 30 years and over attributable to exposure to fine particulate matter (PM_{2.5})

Nearly 8 months

of average life expectancy lost among persons 30 years and over attributable to exposure to PM_{2.5}

7%

of total annual mortality among persons 30 years and over attributable to exposure to PM_{2.5}

The Spring 2020 lockdown: an exceptional situation with learnings for long-term action

Public actions have been devised and are being implemented: reductions in vehicle traffic in urban areas and in industrial emissions

Changes in personal behavior are increasing: teleworking, travel modes, other

Other actions that can help lower air pollution include:

- Improvements in **wood heating** (use of higher quality equipment, higher quality fuel, etc.)



- **Thermal renovation** of housing



- **Improvements in farming practices** to reduce ammonia emissions

