

Air remains cleaner as post-lockdown traffic returns to normal, new research suggests

July 13 2020, by Julie Gatenby



Credit: Scott Meltzer/public domain

Air pollution is lower than expected in some of the UK's towns and cities, despite a return to almost normal traffic levels, new research shows.

Findings by the University of York show that while road traffic is getting back to pre-lockdown levels, some concentrations of air pollutants like nitrogen dioxide (NO₂) are still lower than expected.

Researchers suggest that factors such as staggered commutes and homeworking is reducing congestion—which plays a factor in [air pollution](#).

Dr. David Carslaw from the Department of Chemistry has been analyzing data from roadside monitoring sites across the UK throughout the lockdown. This has included monitoring concentrations of NO₂, which is a key pollutant caused by vehicles.

On average across the UK, NO₂ levels were 56 percent lower than normal at the height of lockdown and as of 1 July, with many restrictions currently lifted, they remained about 30 percent lower. In York, NO₂ levels were 52 percent lower than normal at the height of lockdown and as of 1 July, with many restrictions currently lifted, they remained about 18 percent lower.

Dr. Carslaw said: "The data across the UK showed a deep plunge after lockdown for concentrations of [nitrogen dioxide](#) of around 50 percent on average nationally and a slower recovery. Things are not back to normal according to the air quality data. It seems that while traffic levels look like they have mostly returned to normal, concentrations of some air pollutants are still quite a lot lower than expected. We think the reason is that congestion has not fully returned, and this has quite a large effect on emissions and hence concentrations. Trying to measure the impact on [air pollution](#) of congestion is very challenging as there are so many factors that affect emissions. The analysis of data gathered during lockdown and coming out of lockdown might give researchers an opportunity to better understand more about linkages between air pollution and [congestion](#)."

Dr. Carslaw's team have been analyzing data from more than 100 sites across a wide range of towns and cities in the UK as part of ongoing research into concentrations of roadside air pollutants.

Provided by University of York

Citation: Air remains cleaner as post-lockdown traffic returns to normal, new research suggests (2020, July 13) retrieved 10 July 2024 from <https://phys.org/news/2020-07-air-cleaner-post-lockdown-traffic.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.