

# Researcher says forecasting pollution can be difficult and complicated

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*Dr Helen Dacre, a lecturer from the University's Department of Meteorology provides expert opinion on the [high levels of pollution forecast for Friday 10th April](#).*

"High [air pollution levels](#) can cause unpleasant and dangerous effects on health, both long and short-term. Toxic gases, such as [nitrogen dioxide](#) and ozone, as well as fine dust particles in the air, can all cause problems for people with heart, lung and breathing problems, such as asthma.

"The problem is likely to be particularly bad on Friday because southerly flow will lead to pollution being imported from the industrialised urban parts of Europe. This pollution will blow across Britain and add to the local pollution produced by British car drivers and heavy industry, creating high concentrations of pollutants in the air. On Saturday however, the weather will change. Clean Atlantic [air](#) will spread across the UK and pollution will return to low levels.

"Forecasting pollution is particularly difficult and complicated. It combines the uncertainties of a five-day weather forecast, with predictions about emission levels, and pollutant models. At the University of Reading, we're currently engaged in research to evaluate the accuracy of the Met Office's new five-day pollution forecasts. We hope that by comparing forecasts to what actually happens in terms of pollution, we can identify ways to improve the forecast, making it more accurate and useful for people who rely on it to plan their day-to-day lives.

"The University of Reading is also conducting research to see how climate models, which show how climate patterns will shift in the future, could be used to predict if pollution will get better or worse. By examining past relationships between [weather patterns](#) and pollution, we can use this information to determine how shifting weather patterns are likely to change the UK's [pollution](#) levels in the future."

Provided by University of Reading

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