Canairy app tracks outdoor workers' exposure to air pollution

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A new app launched today by King's College London and the British Safety Council provides outdoor workers, and their employers, with crucial information about their exposure to air pollution.

Canairy draws on the London Air Quality Network (LAQN) pollution map at King's and the worker's GPS to calculate a user's exposure to pollution on an hourly basis. Once this exposure exceeds the World Health Organisation's (WHO) limits for the concentration of nitrogen dioxide, particulates and ozone, the app notifies the user and suggests tips to reduce their exposure, including working away from traffic, reducing strenuous work or putting up a screen barrier.

As well as their workers, employers will be able to access this anonymised exposure data and use it to inform how they schedule work for them to avoid the worst levels of toxic air.

Andrew Grieve, Senior Air Quality Analyst at King's College London, said: "As a group, outdoors workers are particularly vulnerable to long-term exposure to ambient air pollution. Within a workplace, the risk of people's exposure to polluted air can be controlled using well-established methods, but this is more difficult for outdoor workers, many of whom work near or on busy roads.

"The app gathers data from the London network, which is the most advanced urban air quality monitoring network in the world. We hope that information provided by the app can be used to inform health risk

assessments and contribute to scheduling work that reduces exposure. Crucially it can also help employers and workers to monitor their progress in avoiding unhealthy levels of pollution."

Together with the app, the British Safety Council is launching a UK-wide Time to Breathe campaign with a publicity event staged in Oxford Circus, central London, on Tuesday 12 March. The campaign aims to draw the attention of employers, policy-makers and regulators to take seriously the risks of air pollution to the health of outdoor workers. It will provide free resources, including posters and advice, for workers and employers to use in making changes to reduce exposure to harmful air pollution.

Lawrence Waterman, Chairman of the British Safety Council, said: "Our campaign will highlight every employer's duty of care for the risks from ambient air pollution. The regulator (HSE) tells us that it doesn't regulate the ambient environment, and the recent Clean Air Strategy had little or nothing to say about people who spend their working lives outdoors. These workers are caught in a blind spot and we think their health is at risk.

"By working with King's College London and our members we have been able to bring technology and business together to raise awareness of the dangers from air pollution to outdoors workers. We want employers to use the information as part of their consultations with their workers and work together to reduce their exposure.

"We are calling on London-based employers to join those trialling Canairy and help us build an accurate picture of the exposure faced by outdoor workers. This information will be a cornerstone of future campaigns for better research into the links between occupation and health data. Given that we don't even know how many outdoor workers there are in the UK, we need those authorities with responsibility for our

health and environment to work together on this issue."

Construction company Kier has been one of the first companies to trial the app. Mitesh Solanki, Managing Director for Kier Local Authority Highways, said: "At Kier, the health and wellbeing of our workforce is our number one priority and I'm really pleased that our LoHAC (London Highway Alliance Contract) contract with TfL was the first to trialCanairy. This proactive approach to utilising the latest technology will help us reduce our people's [exposure](#) to air pollution, which is a serious concern for all responsible employers."

Canairy app runs on both Apple and Android platforms.

Provided by King's College London