

## Smartphone 'app' will help pollution study

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BUFFALO, N.Y., Feb. 10 (UPI) -- U.S. researchers say they're developing a unique smartphone application that will help them track participants in a study of urban air pollution exposure.

Scientists at the University of Buffalo say the smartphone application will help them in their study of urban pollution, which can vary from downtown to suburbs and from work environments to home settings.

These variations make it essential to be able to track study participants' locations and collect data throughout the day, something smartphones equipped with GPS can facilitate, a UB release said Tuesday.

"There are many ways to estimate air pollution exposures among humans," research leader Carole Rudra says, but most methods "don't take into account the fact that people don't spend all day inside their homes. In an urban area, exposure changes significantly as people go about their daily activities.

"To overcome this limitation in a way that is convenient for study participants and feasible for future large studies, we will use smartphones to track study participants' locations over 24 hours," Rudra says. "Their location registers automatically, so they don't have to call in or do anything else."

The 40 participants will use their own GPS-equipped smartphones, which will record their location in Buffalo several times a day during a three-month study period.

The researchers will then check air pollution monitoring sites in various locations to determine participants' exposure to a number of pollutants.

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