

Cycling, Air Pollution, and Health Study

We are a team of researchers from the University of British Columbia (UBC) who are investigating the health effects of air pollution. We are writing to ask if you would be interested in participating in this study. Recreationally active individuals aged 19-39 may be eligible to participate in the study. People who smoke or have health conditions such as asthma cannot be considered for participation.

We would like to measure the levels of air pollution present while you ride a bicycle along street routes in Vancouver, and compare some measurements of health before and after the ride. Automobile traffic is one source of air pollution in the Vancouver area that can negatively affect health. Choosing bike routes in areas where there is less car traffic may decrease the exposure of individuals to air pollution.

The study will take place between July 2, 2010 and November 1, 2010. You will be asked to ride an instrumented bicycle for one hour along two predetermined routes. Instruments on the bicycle will measure the levels of air pollutants in real time during each bike ride. We will measure your lung function using a simple test lasting 5 minutes where you exhale into a tube, and take a small blood sample from your arm. We will also measure the health of your blood vessels in a test lasting approximately 20 minutes that involves having a blood-pressure cuff on one arm, and a sensor on each index finger. Lastly, we will measure your breathing rate while you are cycling on an exercise bike. None of the tests should cause any discomfort. All of these tests will be done before and after cycling on each of the routes. We expect each of the two testing sessions to last 3 hours.

All data that we collect will be kept in secure facilities, and all results will remain anonymous.

If you are interested in participating, or would like further details about the study and the procedures to be used, please contact **Christie Cole by e-mail at ubc.bike.study@gmail.com**. Alternately you can contact myself at the number listed below.

Thank you for your time and attention,

Sincerely,



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