## Study to examine possible links between traffic noise and heart disease

There is growing interest in the environmental causes of cardiovascular disease. Recently, investigators have found that these diseases may be linked with exposure to outdoor air pollution and with exposure to noise pollution. But these findings are complicated by the fact that in cities a major source of both of these pollutants is the automobile. So, the question of how much of the disease we see is attributable to noise, and how much is attributable to air pollution. Perhaps they act synergistically? Researchers at the University of British Columbia's School of Occupational and Environmental Hygiene are proposing a study to investigate the joint effects of noise and air pollution on cardiovascular disease risk. No study has done this before. They will follow an adult population of all those 45-85 years old in 1999 who have lived in the Greater Vancouver Regional District (GVRD) for five years. Through administrative health records (and maintaining complete anonymity) residential histories will be used to assess participants' exposure to noise and air pollution, and then investigate whether disease rates are greater in higher exposure groups (which would be expected if there is a true association) and whether those rates are different for noise if one looks in areas of high vs low air pollution (so called "interactive effects of noise and air pollution"). The researchers already created the cohort and assessed air pollution levels through an earlier grant with Health Canada. This proposal is seeking funding to generate a noise "map" for the GVRD to assess noise levels and to inform the joint effects analysis. The work is highly relevant because understanding the true relationship between noise, air pollution, and disease will help us target mitigation strategies. The map that is produced will be the first of its scale in North America, and a valuable tool for future research on population health and well-being in Canadian cities. The work is being supported by the Canadian Institutes of Health Research.

noise notes volume 7 number 3

## LEBANESE NIGHTLIFE

Although Lebanese Tourism Ministry closed 20 bars and restaurants in Gemmayzeh recently, a senior ministry official said most would likely reopen soon, while the ministry would continue to shut down establishments throughout Beirut which do not have or are violating their operating licenses. As the ministry stepped into the long-simmering tension between Gemmayzeh residents and bar and restaurant owners, the two groups agreed to form a new joint committee to draft a code of ethics for nightlife in the district, while Gemmayzeh Mayor Elie Nassar said the residents did not want the enterprises to disappear but only to abide by the law. Many of the proprietors of the Gemmayzeh bars closed by the ministry with the ministry to fulfil their licensing obligations, said ministry director general nada Sardouk. "We have 20 decrees to close these bars to tell them that they need to resolve their situations," Sardouk said. "Eighty percent of [the establishments in Gemmayzeh] are working normally, and they have licenses. Twenty percent of them are chaotic. All of them need to settle the noise and the music and the way they run their businesses," she added. "You cannot have music until six in the morning. We are going to settle on rules and a code of ethics between them and the residents." Ministry officials tied shut the doors of the 20 bars and restaurants leaving notices inside plastic bags on the strings. Despite taking this step, Sardouk said some 16 of the targeted bars and restaurants probably "will be opening soon" once they meet the ministry's conditions. However, the ministry will shut down another two or three Gemmayzeh establishments as well as 10 other bars and restaurants in the city which are violating ministry regulations, Sardouk said. The anger of Gemmayzeh residents recently erupted, when dozens blocked the neighborhood's main thoroughfare for hours while dressed in pyjamas and carrying pillows to symbolize the sleepless nights caused by the unending din from the nightly merrymaking.

## **AVIATION NOISE**

The environmental impact of aviation is increasing faster than predicted by many industry and government estimates, according to an unpublished study undertaken last year by an influential group of aviation experts. The report, Trends in Global Noise and Emissions From Commercial Aviation for 2000 through 2025, warns total emissions from the global aviation sector will soar from 572 million tonnes in 2000 to between 1.2 billion and 1.4 billion tonnes by 2025. The projections, which are based on official government figures on the number of flights and authoritative emission modelling techniques, are broadly in line with the worst case scenario put forward by the UN's Intergovernmental Panel on Climate Change (IPCC), but are some 20 per cent higher than the best case scenario, which had been widely endorsed by many within the aviation industry. The study found that industry projections for the numbers of people affected by aircraft noise and levels of NOx pollution around airports have been underestimated, warning that by 2025 30.3 million people will be affected by aircraft noise and that NOx pollution will more than double to 6.1 million tonnes. The report was compiled by representatives from US Department of Transport, European air traffic control agency Eurocontrol, Manchester Metropolitan University and QinetiQ, and was submitted at the Air Traffic Management R&D seminar in Barcelona last year hosted by Eurocontrol and the US Federal Aviation Authority. However, the report's authors were subsequently told that it would not be published and the document was removed from the conference website. In response to claims that the report had been 'suppressed', a spokesman for the IATA said that the study had failed to take account of potential improvements in technology and air traffic management designed to cut aviation emissions. His stance was supported by a spokeswoman for Eurocontrol who argued that the failure of the report to account for such improvements meant that "to present the figures put forward in the paper or the report as a realistic scenario is therefore misleading."

42 volume 7 number 3 noise notes