Edinburgh medics call on City Council to keep active travel measures

More than 140 leading doctors and health professionals in Edinburgh have written an open letter to the City Council supporting the retention and extension of changes to the city's travel infrastructure.

The medics say the changes are potentially life-saving. The letter says they have the twin benefits of improving public health and mitigating the climate emergency.

During Scotland's first lockdown, The City of Edinburgh Council made a host of changes to paths, pavements, walkways and cycle lanes to allow for residents to exercise whilst maintaining physical distancing. The council has said that the project saw a surge in people walking and cycling.

The letter has been prepared by Dr Laura McWhirter, who is Consultant Neuropsychiatrist in Edinburgh:

"As health professionals, we have a responsibility to protect and promote the health of the population. We have a responsibility to address inequalities and to advocate for the needs of the most deprived and disadvantaged members of the population we serve.

"We are concerned about the impact of the climate crisis on health, globally and locally.

"We support the retention, and further development and integration of infrastructures designed to support active travel and clean air for the whole population of Edinburgh, to mitigate inequalities in health, local mobility, and air quality. We are concerned that suggested steps to reverse active travel measures introduced during the COVID-19 pandemic would be a retrograde and harmful step for the health of the population of Edinburgh."

The open letter has been welcomed by the walking and cycling charity Sustrans and by the recently formed group Better Edinburgh for Sustainable Travel.

Sustrans Deputy CEO John Lauder said: "I fully support what these leading medical professionals are calling for. All the evidence shows that more cycling and walking is good for public health and has proven environmental benefits in tackling the climate emergency. There just isn't a logical argument to prevent making it easy to get about actively.

"It is clear that the way we travel, work, spend time with each other and enjoy our urban spaces have been changed by the pandemic. It is increasingly clear that there is no 'old normal' to go back to."

Speaking on behalf of Better Edinburgh for Sustainable Travel, a collective of community groups across Edinburgh that promote active travel, Stella Thomson said: "We welcome this vital letter to councillors from medical professionals. The case for the rapid development of

a safe active travel network across Edinburgh, and a significant reduction in vehicular traffic, is unequivocal.

"We cannot afford further delays. Everyone, especially children, should have the opportunity to walk, wheel or cycle if they are able, to breathe clean air, and to feel safe on our city's streets.

"As the signatories point out, well designed active travel infrastructure will reduce inequalities and improve access for all. We hope the letter will encourage all councillors to make the bold and transformative decisions required to address both the climate emergency and public health. It is time to end the domination of traffic in so many of our streets and neighbourhoods."

The full letter and list of signatories is appended below.

The letter is also available as a webpage ideal for sharing on social media at: <u>https://tiny.one/medics4activetravel</u>

For further information please contact:

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Edinburgh September 2021

Open letter to the City of Edinburgh Council

Dear Councillors,

We are a group of doctors and other health professionals, living or working in Edinburgh, and write to support the retention and extension of changes to travel infrastructure in Edinburgh and the Lothians, to improve public health and mitigate climate emergency. We hope that the points and evidence below will support the council to make decisions that will help to benefit, protect, and reduce inequalities in the health of the population of Edinburgh.

Climate crisis and health

One of the duties of a doctor as stated by the General Medical Council is "to protect and promote the health of patients and the public"¹. As health professionals we have been reminded by our professional bodies of our responsibilities to raise the profile of the climate emergency, which is a public health emergency likely to have a much greater impact than COVID-19^{2,3}. We have a responsibility to speak up for disadvantaged groups who are disproportionately vulnerable to the health and economic impacts of the climate crisis.

Health inequality

Deprivation is strongly associated with poor health outcomes. Premature death remains four times higher in the most deprived areas of Scotland compared with the least deprived areas⁴. In NHS Lothian, the most deprived areas have 67% more deaths than the overall average. Within the City of Edinburgh, men living in the least deprived areas can expect to live for 11 years longer than those in the most deprived areas, and women can expect to live for 8 years longer⁵.

Those living in areas of deprivation are less likely to drive but much more likely to be injured in a road traffic collision⁶. Rates of pedestrian casualties are twice as high in children as in adults, and pedestrians over 70 years of age have the highest fatality rate⁷.

Many of our patients do not have the financial means, health status, or abilities to access private car transport. Children, the frail elderly, and people with chronic illnesses or disabilities are disadvantaged in opportunities to access services and community by systems which prioritise private car transport.

Moves to promote safe active travel, including widening of pavements and provision of segregated paths, make the urban environment more accessible for people with disabilities and release road space for reliable and efficient public transport.

Measures to improve the urban environment and promote active travel in Edinburgh will differentially benefit the most disadvantaged members of our community and so help to reduce health inequalities in Edinburgh. We ask that councillors carefully consider the differential impact of decisions to prioritise private car transport on those for whom private car transport is not an option.

Air pollution and health

Air pollution is strongly associated with poor health outcomes⁸. A joint Royal College of Physicians and Royal College of Paediatrics and Child Health report estimated that outdoor air pollution causes 40,000 deaths a year in the UK⁹. Data from Scotland shows a particularly strong association between air pollution and respiratory disease and deaths¹⁰. Transport – predominantly car transport – is the main source of air pollution in Scotland¹¹.

Edinburgh City Council has six Air Quality Management Areas, with concerning levels of air pollution related to vehicular traffic¹².

Decisive action from the council to promote active travel and reduce private car traffic in Edinburgh will help to reduce air pollution and associated harm to health.

Physical activity and health

Regular physical activity is associated with improved health outcomes at all ages¹³.

UK Chief Medical Officers recommend that children and young people should engage in moderate physical activity for at least one hour every day. For adults, 150 minutes of moderate activity per week is associated with a 40% reduction in risk of type 2 diabetes, 35% reduction in heart disease, 25% reduction in joint and back pain, and 20% reduction in bowel and breast cancer¹³.

National data indicates that in Scotland during 2019 only 66% of adults met this target, whilst in the same year fewer than 50% of journeys under two miles were made on foot¹⁴.

Segregated active travel infrastructure allows everyone to increase their physical activity levels through active travel; not only those who already enjoy regular physical activity.

We ask that the council considers the beneficial and protective health effects of physical activity when considering its decisions about travel infrastructure in Edinburgh.

Behaviour change for public health

Changing established patterns of behaviour is difficult. We understand that a move away from the current position of private car dependency can feel difficult.

Bold Scottish strategies have led to strikingly effective population shifts in behaviour for better health; tobacco smoking restrictions have saved many lives, and early data suggests that minimum alcohol unit pricing has reduced amount of alcohol purchased by the heaviest alcohol consumers^{15,16}. Both of these strategies met with initial resistance, but are now broadly supported.

Now, local government in Edinburgh has the potential to lead a bold and exemplary modal shift away from car-dependence which will benefit and protect the health of the people of Edinburgh.

Key points:

- As health professionals, we have a responsibility to protect and promote the health of the population. We have a responsibility to address inequalities and to advocate for the needs of the most deprived and disadvantaged members of the population we serve.
- We are concerned about the impact of the climate crisis on health, globally and locally.
- We are concerned about harms to health caused by air pollution in Edinburgh.
- Regular physical activity is associated with improved health outcomes at all ages.
- We support the retention, and further development and integration of infrastructures designed to support active travel and clean air for the whole population of Edinburgh, to mitigate inequalities in health, local mobility, and air quality.
- This includes quiet routes in the vicinity of schools to allow safe active travel for families, an integrated network of segregated safe paths for cycling, city-wide subsidised cycle hire programmes, and low-emission zones.
- We are concerned that suggested steps to reverse active travel measures introduced during the COVID-19 pandemic would be a retrograde and harmful step for the health of the population of Edinburgh.

Yours sincerely,

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References

- 1. General Medical Council. *Good Medical Practice*.; 2013. Accessed August 21, 2021. www.gmc-uk.org/guidance.
- 2. The Lancet Public Health. Mitigating climate change must be a priority for public health. *Lancet Public Heal*. Published online August 2021. doi:10.1016/S2468-2667(21)00190-0
- 3. Hurley R. Doctors declare climate emergency and call for tighter targets. *BMJ*. 2019;365:l4445. doi:10.1136/bmj.l4445
- 4. Office of National Statistics. *Long-Term Monitoring of Health Inequalities : January 2020 Report.*; 2020. Accessed August 21, 2021. https://www.gov.scot/publications/long-term-monitoring-health-inequalities-january-2020-report/
- 5. Scottish Public Health Observatory. Online Profiles Tool. Accessed August 21, 2021. https://www.scotpho.org.uk/comparative-health/profiles/online-profiles-tool
- The Scottish Public Health Observatory. Injuries: Road traffic injuries. Published 2021. Accessed August 21, 2021. https://www.scotpho.org.uk/health-wellbeing-and-disease/injuries/data/road-traffic-injuries/
- 7. Transport Scotland. *Commentary*.; 2018. Accessed August 21, 2021. https://www.transport.gov.scot/publication/reported-road-casualties-scotland-2018/commentary
- 8. WHO. Health and the environment: addressing the health impact of air pollution. *Sixty-Eighth World Heal Assem Agenda 68/18 Item 146*. 2015;(2012):6. Accessed August 21, 2021. https://apps.who.int/iris/bitstream/handle/10665/253237/A68_R8-en.pdf?sequence=1&isAllowed=y
- 9. RCP Policy: Public Health. *Every Breath We Take: The Lifelong Impact of Air Pollution | RCP London.*; 2018. Accessed August 21, 2021. https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution
- 10.
 Scottish Government Health and Environment Working Group. Cleaner Air for Scotland (CAFS) Strategy

 HEWG
 Final
 Report.;
 2019.
 Accessed
 August
 21,
 2021.

 http://www.scottishairquality.scot/assets/documents/Health-Environment-Working-Group-Report.pdf
- 11. Scotland's environment. Air quality | Scotland's environment web. Published 2017. Accessed August 21, 2021. https://www.environment.gov.scot/our-environment/air/air-quality/#policyAndLegislation
- 12. Department for Environment Food and Rural Affairs. Air Quality Management Areas (AQMAs). Accessed August 21, 2021. https://uk-air.defra.gov.uk/aqma/list?la=E&country=scotland&pollutant=all
- Davies DSC, Atherton F, McBride M, Calderwood C. UK Chief Medical Officers' Physical Activity Guidelines. Dep Heal Soc Care. 2019;(September):1-65. Accessed August 21, 2021. https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officersreport
- 14. Scottish Government. National Indicator Performance | National Performance Framework. www.nationalperformance.gov.scot. Published 2020. Accessed August 21, 2021. https://nationalperformance.gov.scot/measuring-progress/national-indicator-performance
- Anderson P, O'Donnell A, Kaner E, Llopis EJ, Manthey J, Rehm J. Impact of minimum unit pricing on alcohol purchases in Scotland and Wales: controlled interrupted time series analyses. *Lancet Public Heal*. 2021;6(8):e557-e565. doi:10.1016/S2468-2667(21)00052-9
- 16. Pell JP, Haw S, Cobbe S, et al. Smoke-free Legislation and Hospitalizations for Acute Coronary Syndrome. *N Engl J Med*. 2008;359(5):482-491. doi:10.1056/nejmsa0706740