RoSPA
28 Calthorpe Road
Birmingham, B15 1RP
United Kingdom
T: +44 (0)121 248 2000
help@rospa.com
www.rospa.com

Patron: Her Majesty The Queen

The Joint Air Quality Unit
Department for Environment, Food and Rural Affairs and Department for Transport

14 June 2017

Dear Sirs,

RoSPA Response to "Tackling Nitrogen Dioxide in Our Towns and Cities"

This is RoSPA's response to the consultation paper "Tackling Nitrogen Dioxide in Our Towns and Cities". It has been produced following consultation with RoSPA's National Road Safety Committee. Our response focuses on the suggestion in paragraph 24 (bullet point e) of the consultation paper that one of the measures to reduce air pollution could be "considering removal of road humps".

RoSPA agrees that air pollution caused by motor vehicles, especially older diesel vehicles, is a serious risk to public health and must be reduced. However, it is crucial that measures to reduce air pollution do not inadvertently increase the risk of road deaths and injuries. Inappropriate speed is one of the most serious road safety problems on Britain's roads, and causes death and injury to thousands of people each year. Removing speed humps, which are proven to be an effective way of reducing road casualties, would increase risk to all road users, but especially to pedestrians, pedal cyclists and children.

A considerable body of evidence over many years has proven that speed significantly increases the likelihood of collisions, the chances of those collisions causing injury and the severity of those injuries.[i, ii, iii, iv]

Road engineering measures are an established and effective way of reducing road casualties, and are one of the key reasons why death and injury on our roads has fallen so substantially over the last few decades. The measures that are most effective are traffic calming schemes and 20 mph zones. They have been shown to reduce:

- Injury accidents by 60% and child injury accidents by 67%[v]
- Road accidents by 56% and fatal and serious injuries by 90%[vi]
- Pedestrian casualties by 54%, child casualties by 54% and child pedestrian casualties by 74%[vi]
- Injury accidents by about 42% and fatal or serious accidents by 53%[vii]
- Road casualties by over 40% and fatal or serious injuries to children by 50[viii]
- Injury accidents by about 15% on average[ix]

Evidence also suggests that 20 mph limits, without traffic calming measures, reduce speeds and casualties, but not as much as 20 mph zones with traffic calming.[x, xi, xii] They are most appropriate for roads where average speeds are already low, below 24mph, and the layout and use of the road also gives the clear impression that a 20mph speed or below is the most appropriate.

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20 mph zones are often located in the most deprived areas and there is a well established link between socio-economic status and risk of being injured in road traffic accidents,[xiii,xiv,xv] so any increase in risk due to the removal of speed humps would disproportionately affect people in those areas.

RoSPA suggests that the strategy for introducing Clean Air Zones should focus on measures that do not increase risk in other areas. Such measures should include:

- Reducing the number of diesel vehicles and encouraging ULEVs
- Improving the performance of diesel engines
- Improving road layouts, junctions and congestion bottlenecks
- Increasing walking and cycling
- Other measures to reduce motor vehicle use

RoSPA thanks the DfT and DEFRA for the opportunity to comment on the proposals. We have no objection to our response being reproduced or attributed.

Yours sincerely,

Kevin Clinton
Head of Road Safety

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