

## **Culverhay Surgery Wotton Under Edge GL12 7LS (Objects)**

**Comment submitted date: Tue 12 Nov 2019**

Dear Councillors,

Re: Bristol Airport, North Side Road, Felton, Wrington BS48 3DP

Planning application: 18/P/5118/OUT

Medact Bristol is a network of healthcare professionals living and working in the Bristol area. We are writing to express our opposition to the proposed expansion of Bristol Airport. We are deeply concerned that any expansion of the airport would constitute a significant threat to human health. We call on you to commit to preventing the expansion of Bristol Airport.

We detail specific health concerns below.

### **1. Air Quality**

Increasing capacity at Bristol Airport will involve increased emissions from aeroplanes and increased emissions from vehicular transport to and from the airport. Together, these will worsen air quality in the Bristol area. We can expect that surface emissions will be increased by 9,500 additional vehicle movements per day. That is 13,000 - 28,000 private vehicle journeys per day to and from the airport.

Premature deaths, of which an estimated 16000 a year globally are attributable to aviation emissions, are mostly due to the PM and ozone released during take-off and landing (Yim et al 2013). For those populations who live within 20km of an airport an estimated 5000 people will suffer a premature death due to aviation emissions.

A recent study by Kings College London examining the Public Health Implications of air pollution from particulate matter (PM) and nitrogen dioxide found evidence of decreased life expectancy of children born and growing up in high levels of exposure (Dajnak et al 2019). In adults, exposure to these pollutants is linked to increased risk of heart and lung disease including lung cancer (Pope III 2002), obesity, stroke, asthma and diabetes (RCP & RCPCH 2019). Mental health is also at risk, with a recent meta-analysis concluding that an increase in ambient PM is strongly associated with increased depression risk in the general population (Gu et al 2019), as well as studies showing a link between poor air quality and dementia (Carey 2018).

It has been shown that exposure to air pollution in pregnancy can cause low birth weight, in particular fetal head size (Turner et al 2017). Low birth weight is associated with morbidity later in life such as coronary artery disease, type two diabetes and asthma.

These health effects exert an economic toll for individuals, businesses and health services. In the UK, the costs due to poor air quality are estimated at more than £20 billion every year (RCP & RCPCH 2019).

### **2. Noise pollution**

Under the planned expansion there would be a flight every three minutes, up to 4000 night flights and thousands of additional residents being 'flown over'.

The World Health Organisation (WHO) recognise noise as an 'underestimated threat' that has significant Public Health effects. They advise decibel (dB) levels of less than 30db(A) in a bedroom for good quality sleep, and less than 35 db(A) in a classroom for effective learning. The average dB level of an aircraft taking off is in the order of 100dB.

Noise pollution is linked to sleep disturbance and heart disease. Furthermore it has been shown to have a greater effect on the very young; the WHO states there is "consistent evidence that noise exposure harms cognitive performance; consistent association with impaired well-being and motivation to a slightly more limited extent [and] moderate evidence of effects on blood pressure and catecholamine hormone secretion."

The Civil Aviation Authority (CAA) list stress, annoyance, sleep disruption, and poor performance at school and work as the recognised effects of noise pollution from airports.

It is therefore clear that the additional noise pollution generated by increased capacity at Bristol Airport would cause morbidity and premature death for the residents of North Somerset and Bristol.

### 3. Climate Change

The negative environmental impacts of the proposed expansion of Bristol Airport are far greater, both in terms of CO<sub>2</sub> and non-CO<sub>2</sub> gases, than is stated in the planning application (Gibbs 2019) and would therefore contribute significantly to the climate emergency. The advisory Committee on Climate Change (CCC) recently stated the UK's planned increase in aviation needs to be curbed. This expansion directly contravenes this advice.

Climate change is the 'biggest global health threat of the 21st century' (Lancet, 2009). The WHO predicts that between 2030 and 2050 there will be an additional 250,000 deaths from malnutrition, malaria, diarrhoea and dehydration due to climate chaos. Climate change is also linked to more chaotic extremes of not only heat but also rain and therefore flooding. This will lead to more problems with contaminated water sources, diarrhoeal disease and vector-borne diseases such as malaria, as well as contributing to a situation where food is less abundant and more expensive.

The UN has also stated that climate change is putting 'the food security of billions of people at risk'. Furthermore, weather chaos will lead to damage and access difficulties to healthcare bases such as hospitals and GP surgeries, strangling the ability of healthcare workers to deliver efficient care and preventing good access for patients.

These wide ranging issues will have direct and tangible negative effects on local residents. Climate change threatens the health and wellbeing of people in our community on our planet and threatens the very existence of the next generation.

In conclusion, we assert that pursuing airport expansion endangers the health and wellbeing of people in Bristol and North Somerset. We present evidence to show the threats to health caused by 3 mechanisms relating to the proposed expansion; worsening air quality, noise pollution and contributions to climate breakdown. We also point out the significant economic costs of these health impacts. We therefore believe there is a moral obligation and duty of care to residents to act now

and oppose airport expansion.

Many thanks for your consideration.

Yours sincerely,

1. Dr Grace Thompson
2. Dr. Fiona Headley
3. Dr. Alice Gardner
4. Dr. Rose Soame
5. Dr. Martin Hartog
6. Dr. Kate Highton
7. Dr. Chris Lamb
8. Dr. Catherine Stace
9. Dr. Hattie Nicholas
10. Dr. Jasmine Schulkind
11. Dr. Kathryn McGregor
12. Miss Jessica Hawkins
13. Dr. Katherine Savage
14. Dr. Martin Hartog
15. Dr. Elaine Lunts
16. Ms. Kate Paul
17. Dr. Thomas Watkivs
18. Dr. Catriona Mellor
19. Dr. James Watson
20. Ms. Lizzie O'Brien
21. Dr. Hannh Trewin
22. Dr. Lucy Pocock
23. Dr. Charles Holme
24. Mr. Jonathan Boyne
25. Dr. Diarmuid White
26. Dr. Seamus Harrington
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28. Dr. Thomas Brookes
29. Dr. Sandra Fenn
30. Dr. Rajeka Lazarus
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41. Dr. Anna Ludvigsen
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47. Ms. Peggy Woodward
48. Ms. Sarah Creagh-Osborne
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50. Dr. Diana Warner
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54. Mrs. Joanna Moulton
55. Dr. Faye Harvey
56. Dr. Victoria Bowler
57. Dr. James Pickard
58. Mrs. Lizzie Gibbs
59. Mrs. Zoe Coppin
60. Dr. Anya Gopfert
61. Dr. Rosa Roberts
62. Dr. Rosie Spooner
63. Dr. Joanna Waldock
64. Ms. Abbie Festa
65. Dr. Patrick Hart
66. Professor Trevor Thompson
67. Dr. Elizabeth Ormerod
68. Ms. Eimer Kilroe
69. Ms. Lucy Shapcott
70. Dr. Connie Smith
71. Dr. Katherine Dixon
72. Dr. Charles Dixon
73. Dr. Lucy Potter
74. Dr. Amy Ashford
75. Dr. William Stableforth
76. Dr. Helen Bowers
77. Dr. Lisa Revell
78. Dr. Annabel Headdon
79. Dr. Hyunkee Kim
80. Dr. Rebecca Vanmarle
81. Dr. Becca Hall
82. Dr. Sarah Goodall
83. Dr. Meg Dillon
84. Dr. Prianka Padmanathan
85. Dr. Trevor Aughey
86. Dr. Claire Ferraro

87. Dr. Jess Elliot
88. Dr. Luke McGeoch
89. Dr Aliesje Kuur
90. Dr Jessica Watson
91. Dr Stephane Paulus
92. DrGemma Matthewman
93. Dr Ceri Lumb
94. Dr Mike Prosser
95. Dr Sam Kuok
96. Dr Mungo Morris
97. Dr Joanna Smallman
98. Dr Charlotte Jones
99. Dr Paul Maries
- 100 .Dr Sophia Reynolds
- 101 .Dr Lavan Sivagnanam
- 102 Dr Rebekah Gabriel
- 103 Dr Kirsty Brownlie
- 104 Dr Louise Younie
- 105 Dr Will Duffin
- 106 Dr Victoria Medland
- 107 Dr Sam Kuok
- 108 Dr Felicity Fay