

# Health impacts of aircraft noise

NACF Project Update

20 Mar 2024

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### Introduction and overview

### Who are we?

# Frontier Economics is one of Europe's largest economic consultancy firms.

- Frontier provides independent and objective advice to clients across a range of sectors and issues.
- We have a strong track record in public policy and healthcare analysis. We work with government departments and agencies, local government, the NHS, charities and the private sector.

#### What have we been asked to do?

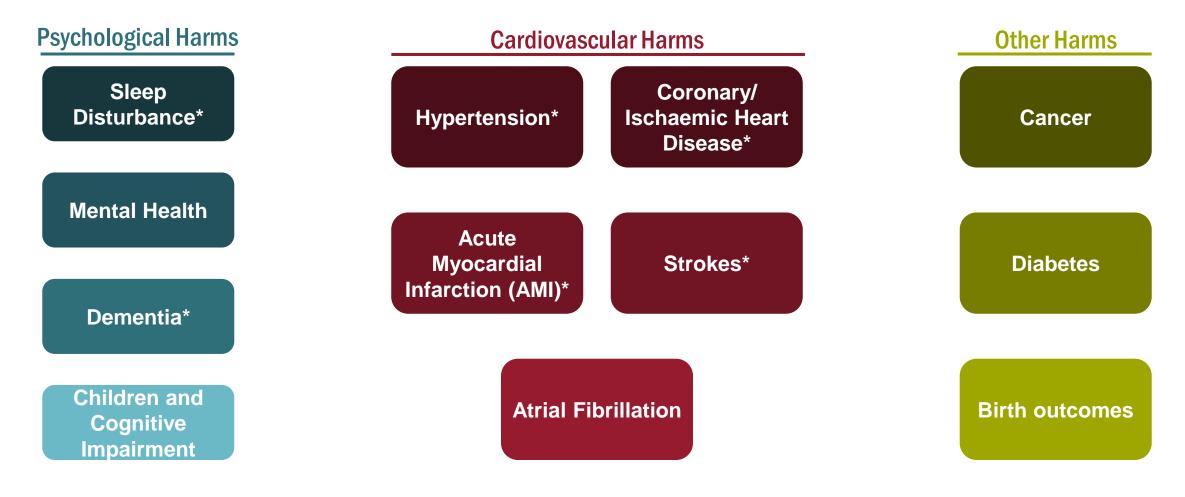
We have been asked to develop a short scoping study for the Independent Chair of the NACF, which assesses the case for considering a wider set of harms from aviation noise.

- We will consider the harms already included in the government's Transport Analysis Guidance (TAG).
- We will consider whether any additional harms should be included in the TAG guidance.

So far, we have reviewed a range of evidence on various health effects, but we are interested in hearing your views on our initial findings and whether there are additional harms and sources we should be considering.

### **Potential harms**

We have considered the following 12 harms in our review so far...



### What we have found (so far)

### **Early findings**

Harms already included in Transport Analysis Guidance:

- Sleep disturbance, AMI and stroke may be appropriate to refine current modelling due to new evidence.
- Hypertension, IHD and Dementia may be insufficient evidence to refine current modelling.

# Harms not already included in Transport Analysis Guidance:

- Mental health, cognitive effects on children, atrial fibrillation and birth outcomes – could potentially be considered in future modelling.
- Cancer and diabetes may be insufficient evidence to include in future modelling.

#### Sources

We have reviewed a variety of public sources including:

- The 2018 WHO Environmental Noise Guidelines paper
- CAA updates on recent work and findings (2019-2023)
- Examples of recent academic papers:
  - Waye & Van Kempen (2021)
  - Baudin et al (2021)
  - Evrard et al (2021)
  - Kim et al (2022)
  - Van Kamp et al (2019)
  - Clark et al (2021)
  - Raess et al (2022)
  - Thompsen et al (2022)
  - Hegewald et al (2017)
  - Argys et al (2020)

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### **INITIAL FINDINGS – SUBJECT TO CHANGE FOLLOWING FURTHER REVIEW**



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