

Representations of air pollution, social isolation and dementia in the UK news

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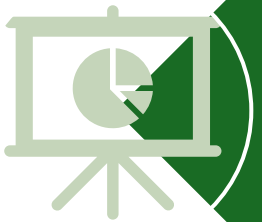
Roadmap for the presentation



Background & research
gap



Our approach

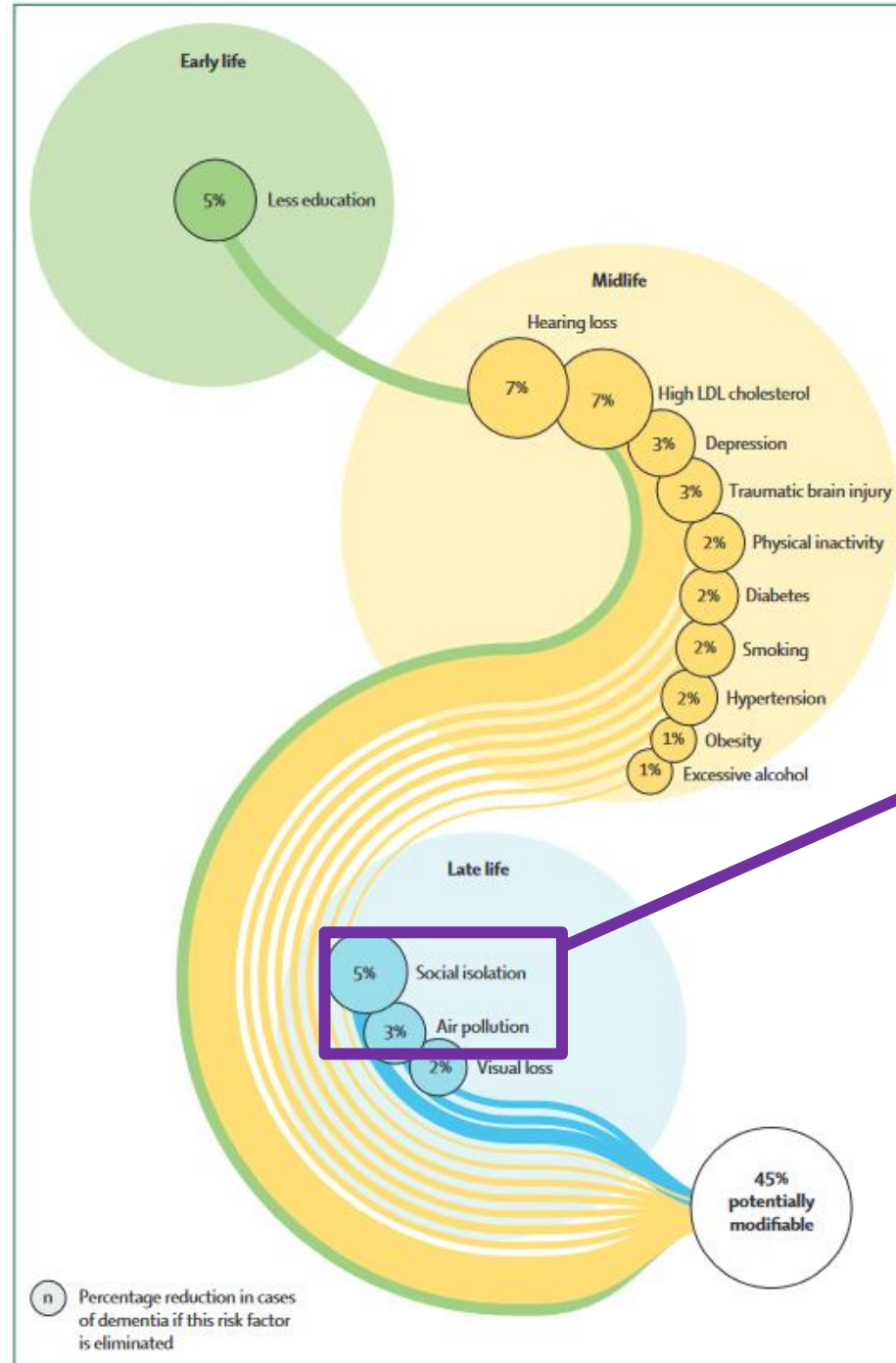


Our findings &
implications

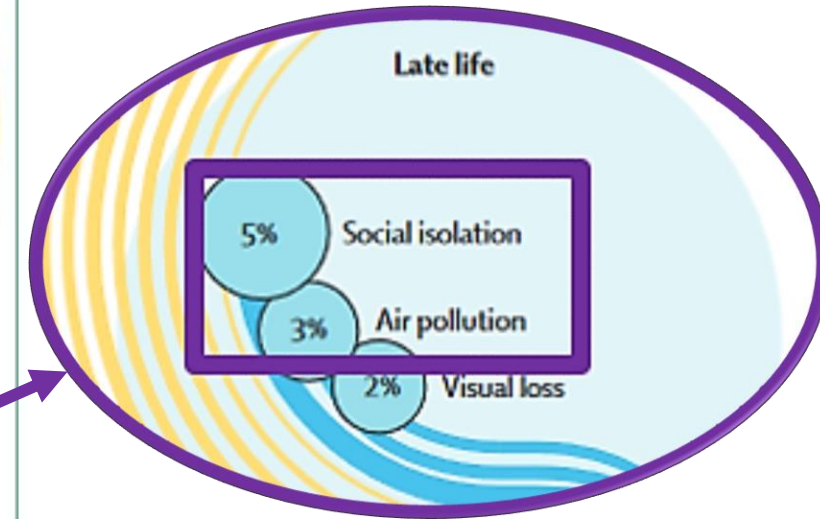
Report identifying 14 **potentially** modifiable risk factors for dementia.

Social isolation and **air pollution** as the 2 factors we will be focusing on.

Both of these factors are **complex societal issues** that can be difficult for individuals to change.



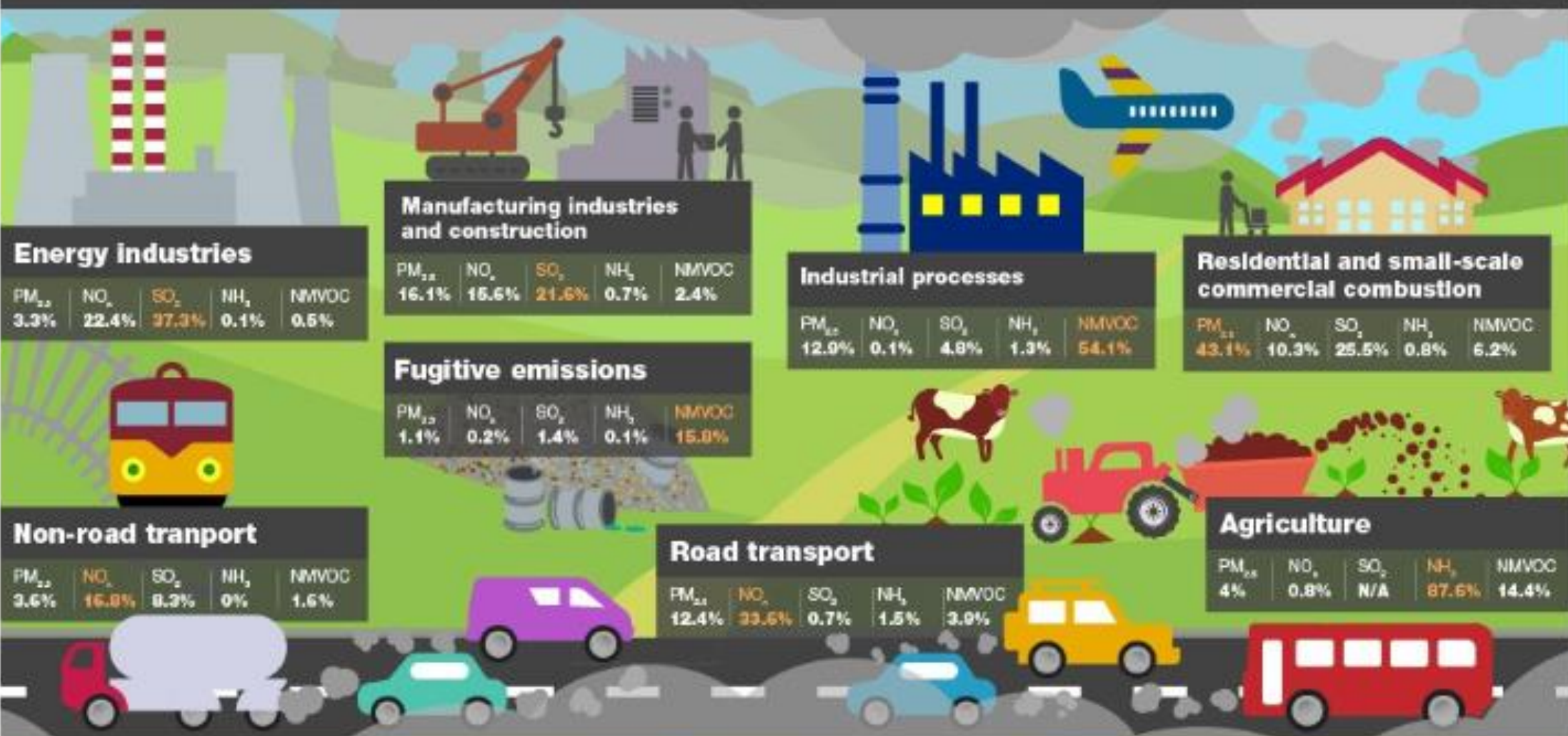
The Lancet Commission Reports:



(Livingston et al., 2017, 2020, 2024)

Figure 9: Population attributable fraction of potentially modifiable risk factors for dementia

Sources of air pollution



Pollution substances:

SO₂ - Sulphur dioxide
NO_x - Nitrogen oxides

NH₃ - Ammonia
PM_{2.5} - Primary particulate matter

NMVOGs - Non-methane volatile organic compounds

The risk factor of air pollution

- Pollution is the **largest environmental cause of disease and premature death in the world** today. (Landrigan et al., 2018)
- Air pollution has been linked to high blood pressure, high cholesterol, plaque build-up in the arteries, insulin resistance, inflammation and stroke, and **these conditions can also raise the risk of dementia** and cognitive decline. (Peters et al., 2019)
- However,...“the opportunity for **personal control** over exposure to risk from air pollution is **low.**” (Peters et al., 2019, p.S160)



The risk factor of social isolation

- Social isolation – having less frequent social contact.
- **Seeing friends or family less than once a month and participating in no weekly group activities** has been associated with higher risk of dementia.
(Livingston et al., 2024)
- Social isolation as a **cultural issue**?: Latin America (0.1%), China (0.7%), India (2%) and UK (5%). (Mukadam et al., 2019; Livingston et al., 2024)



Media and dementia risk

- The media both **echoes and shapes** concerns around health and dementia specifically. (Daube et al., 2023)
- Risk as a **big topic** in newspapers.
- Tend to focus on **individual** risk instead of societal level risk (i.e., things that are more difficult to change).

'I'm a consultant psychiatrist – here are five ways to reduce your dementia risk'

Diet-related changes aren't the only way to reduce your risk of dementia, according to a doctor.

By **DIANA BUNTAJOVA**
13:00, Sun, Feb 4, 2024

EXPRESS 

Physical fitness can lower risk of dementia, research finds

The Guardian UK

Regular exercise can delay dementia onset by 18 months, says study in British Journal of Sports Medicine

THE TIMES 

Dementia is preventable: here are 12 things that put you at risk

Research released this week will spell out the lifestyle and environmental issues that can lead to the condition and the steps that can cut your risk of developing it

The research gap

- Little to no research exploring media representation of **specific** risk factors.
 - This is important because there is a lot of nuance and detail surrounding each risk factor.
- This is an **exploratory study!**
 - We look forward to hearing your thoughts on where we could go next with this work.



Today's questions:

How are the risk factors of **air pollution** and **social isolation** represented in relation to dementia?

- How is this topic situated in relation to **wider social crises**?
- How are **responses** to these risk factors framed – what is recommended and who is made responsible?

Specific context: UK national newspapers



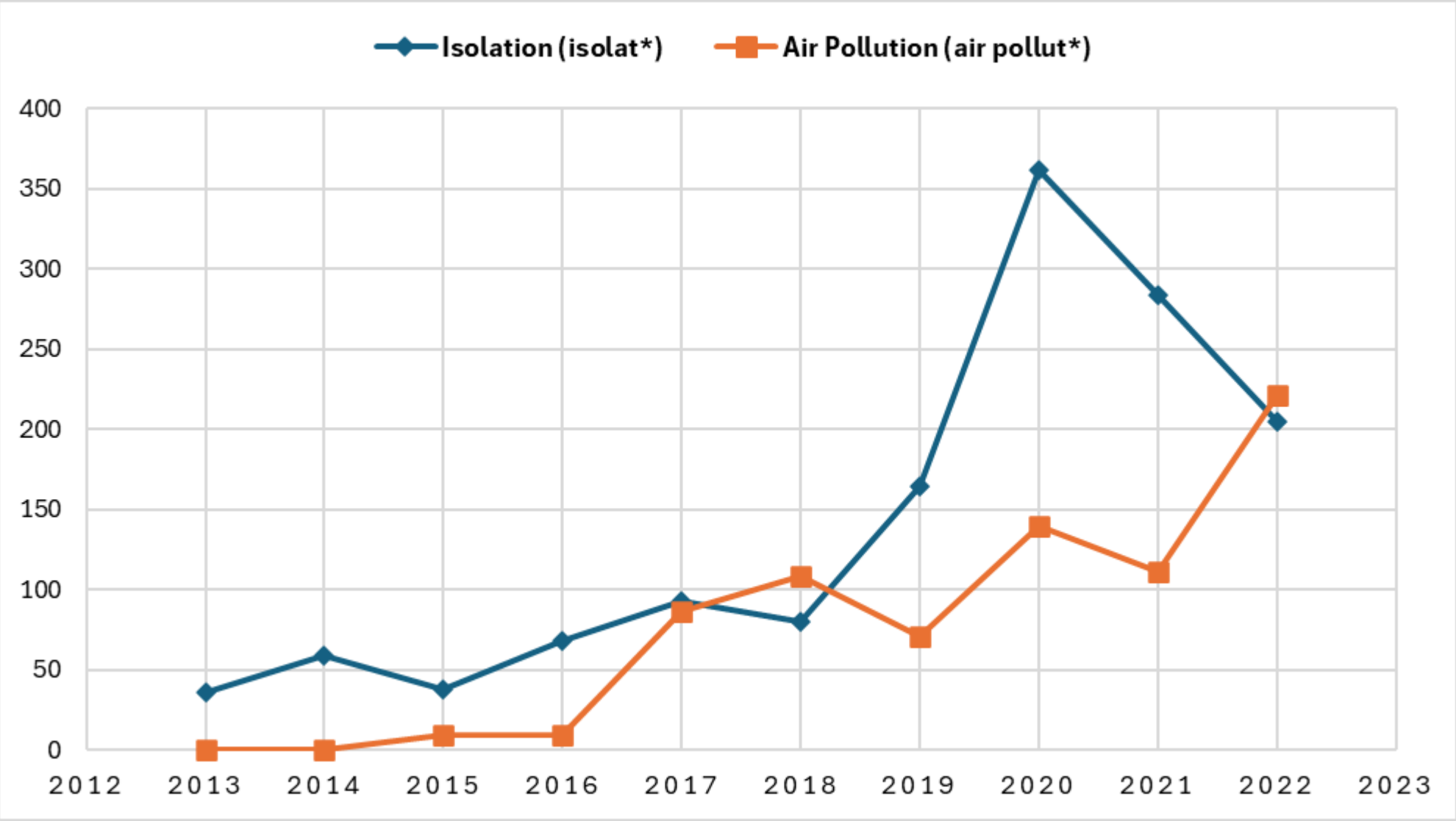
Investigating the questions (method)

- UK news articles that report on dementia:
 - 8 national newspapers,
 - Published between **2013** – **2022**,
 - 11,372 articles = over 9 million words!
- Searched for:
 - **social isolation** (“isolat*”)
 - **air pollution** (“air pollut*”)
[* allows for different words, e.g., isolating, isolation].
- Of 2,144 matches, we analysed **100** random examples of each term in detail.



Findings: Change over the decade

Number of mentions



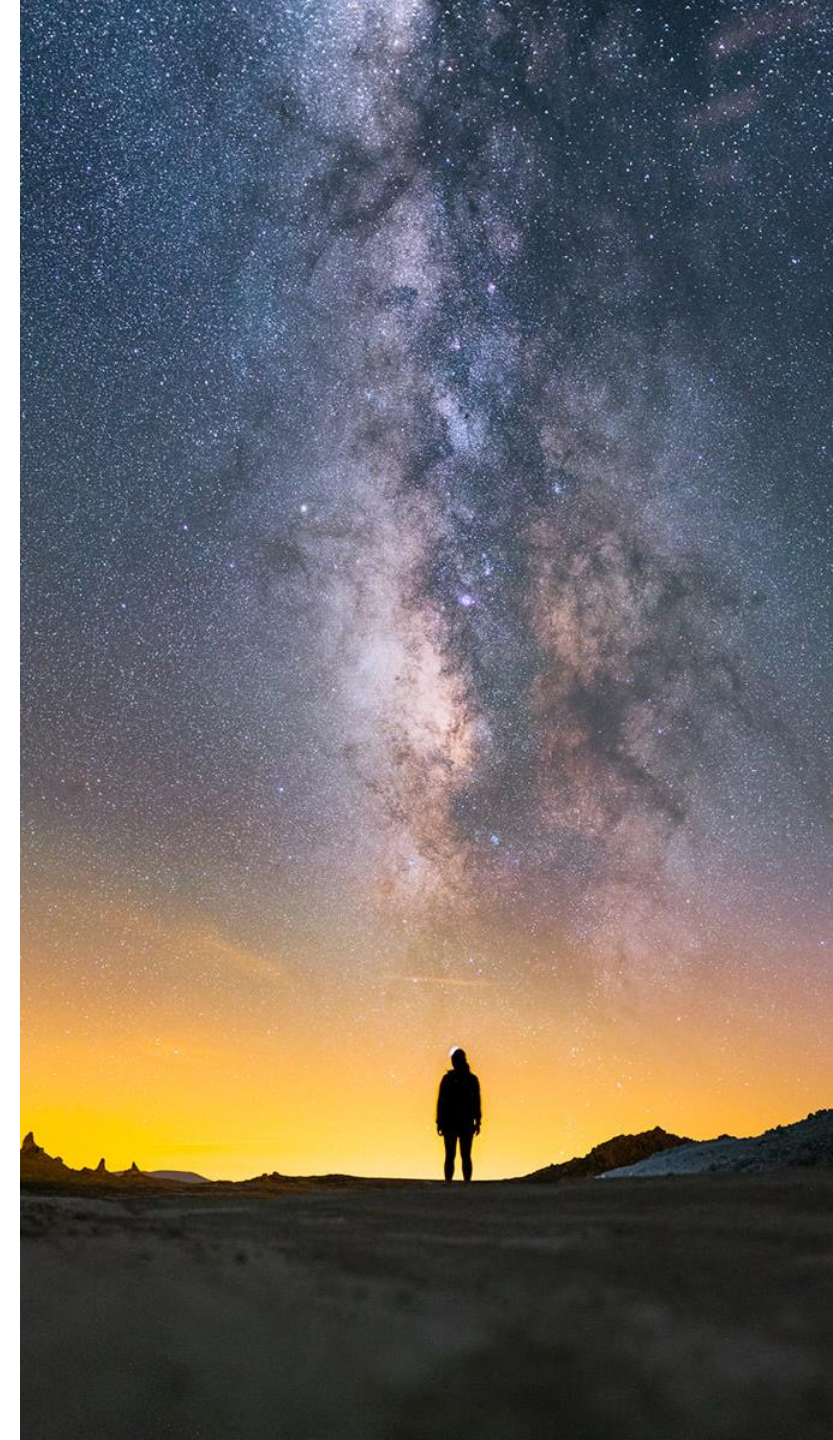
Risk *of* and *from* social isolation

- **Interlinked risk factor**

- Discussed in relation to hearing and sight loss, and depression.

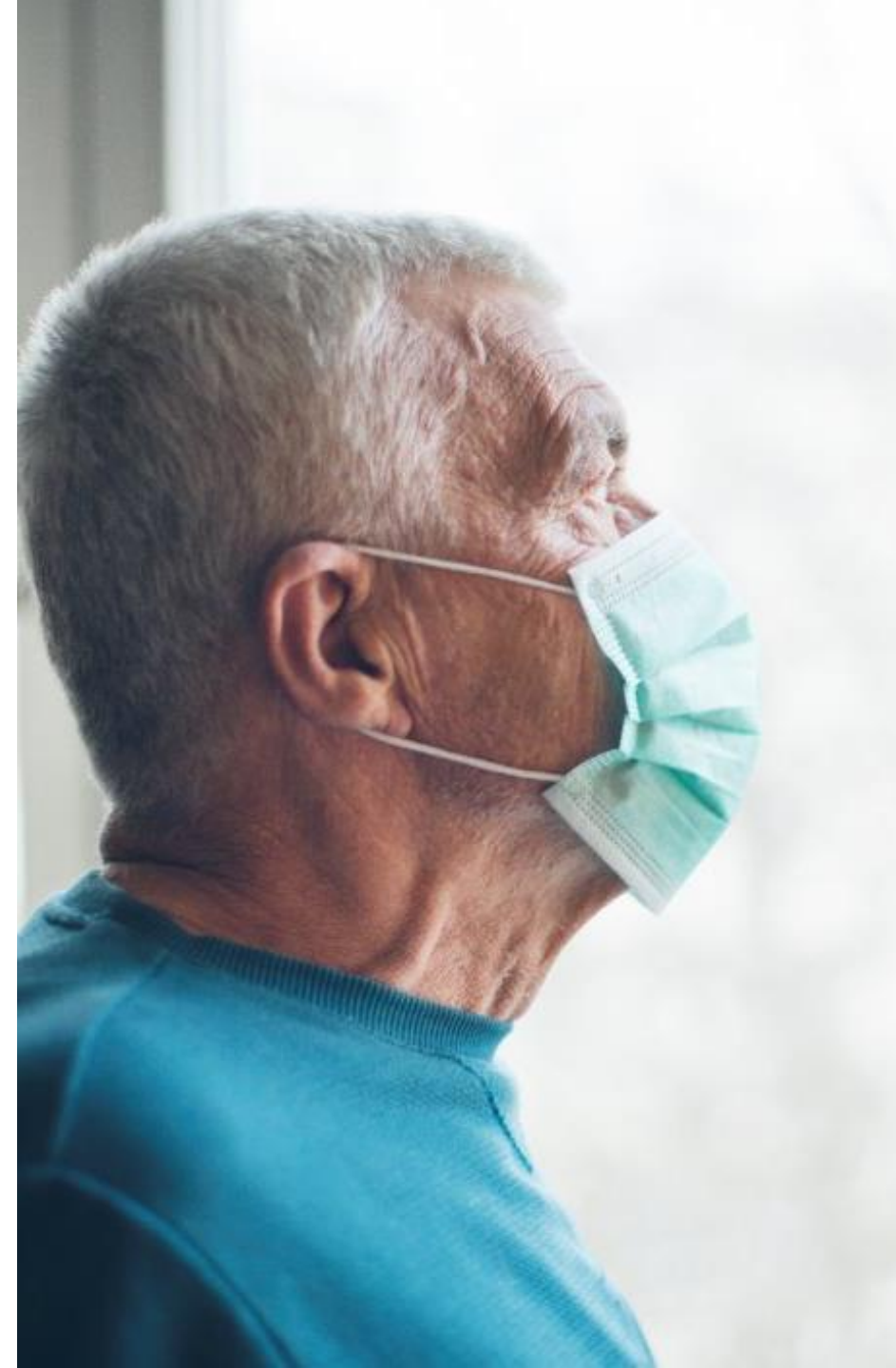
- **Isolating dementia diagnosis**

- ‘It's common to **feel isolated** after a **diagnosis**,' says Emily Adams of the Alzheimer's Society'. (Express, 2022)
- Linked to social treatment, e.g.,
 - Treatment in care homes
 - Feeling isolated and overwhelmed by the care system



Social isolation magnified during Covid-19

- Impact of **pandemic restrictions** on:
 - **people living with dementia:** 'Prolonged social isolation, which is known to accelerate the progression of dementia, has had a **devastating impact**'. (MailOnline, 2020)
 - **....and supporters:** 'As carers we're so lonely, we're isolated, exhausted and traumatised.' (Independent, 2021)
 - Call to '**balance** the risk of harm from the virus with the risk of harm from isolation.' (MailOnline, 2021)



Recommendations: Individual level

- **Seek support and keep social**

- ‘Action: Make the effort to see **friends** at least once a week. If you're feeling lonely, look for ways to **meet new people**, be it joining a book **club** or local choir.’ (Mirror, 2017)

- **Visual and hearing aids**

- ‘Correcting problems with vision and hearing can help **open up a world that was previously closed off** and reduce some of the **isolation** and **loneliness** that these problems can bring’ (Daily Mail, 2018)



Credit: Elliot Manches. Age-positive image library

Recommendations: Society level

- **Action needed:**

- 'We're in a society in which social isolation and loneliness is becoming more common. We hope that at a **community** level and **policy level** work will be done to make it easier for older people to stay connected.'

(Researchers quoted in the Guardian, 2019)

- **Financial obstacles?**

- The BBC is criticised for cutting free TV licences that can help people who can't go out stay '**connected** to the community' (Sun, 2019)
- 'An Alzheimer's charity said people living with dementia in Cumbria face **devastating isolation** as crucial support is cut in the face of rising costs'. (Star, 2022)



Actions: Society level

- **Charity interventions**

- Dementia Friends, other awareness campaigns.

- **Community and charity led groups, e.g.**

- Choirs
- Music, reading and crochet/knitting groups
- Football reminiscence groups

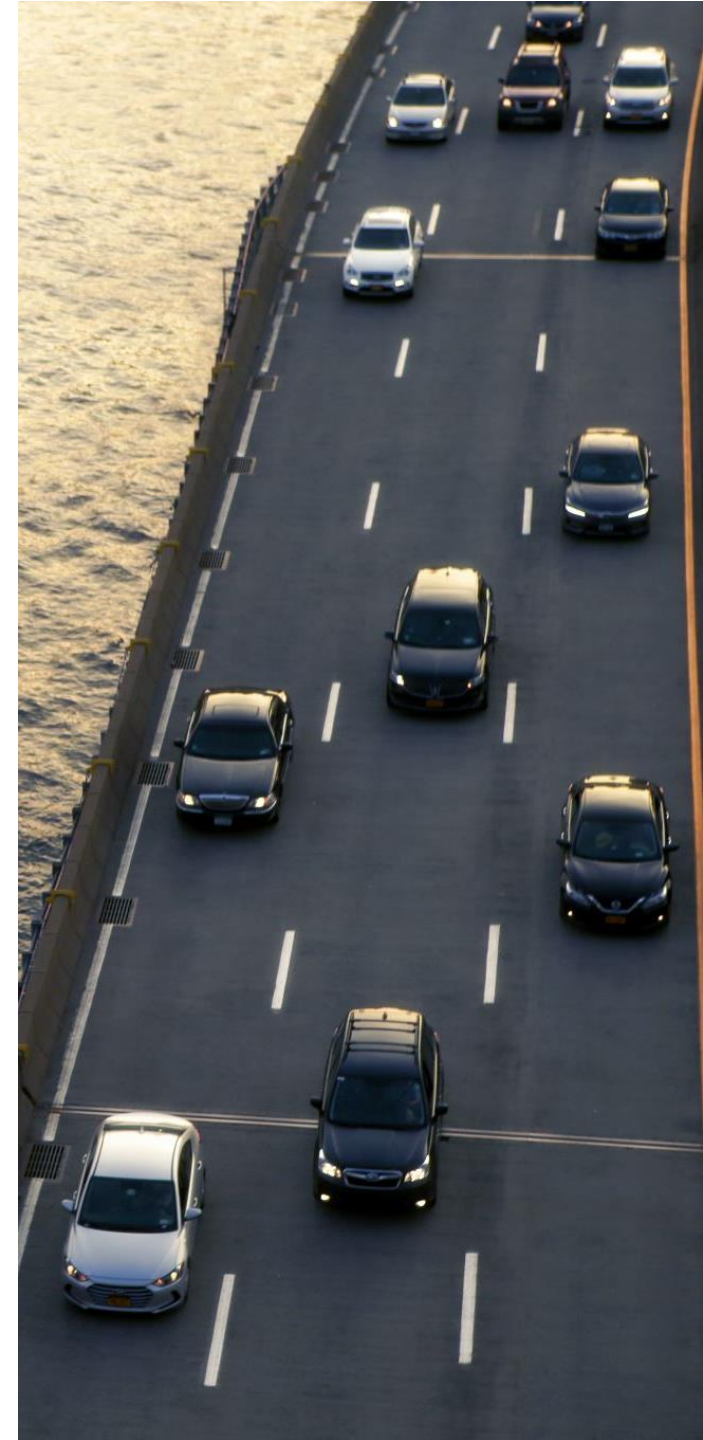
- **Support is a "postcode lottery"**



Credit: In-Press Photography. Age-positive image library.

Air pollution as a risk factor

- **Again, an interlinked risk factor**
 - Related to the risk of **cardiovascular disease** (and in turn, dementia).
- **Air and noise pollution?**
 - 'The potentially damaging effect of **air pollution and noise** from **heavy traffic** on the brain has been the subject of a number of studies.'
(Independent, 2017)



We have a problem!

- 'The UK is **notoriously bad** at **controlling air pollution**, with 37 cities persistently displaying illegal levels and the Government repeatedly being hauled into court over the past few years.' (Mail, 2019)
- UK air pollution laws criticised as **not strict enough**.



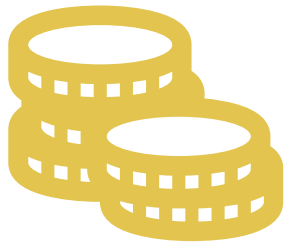
Actions being taken:



Expert advisory groups



Policies



Government investment



Campaigns and court cases



CLEAN AIR FOR ALL

The Times air pollution campaign: our manifesto for clean air

The Times | Thursday May 09 2019, 5.00pm, The Times

Society level: action needed

- **Stricter rules** on air pollution levels.
Tackle sources of fossil fuels:
 - Regulate polluting vehicles, wood-burning stoves, etc.
- **Invest in less polluting infrastructure:**
 - Make **public transport** more accessible and affordable (e.g., improve cycling routes).
 - Planting **hedges** 'can cut fumes by around a third at pavement level'. (MailOnline, 2019)



Individual action needed too!

- **Reduce your polluting effect:**
 - Reflect on your **transport use** – especially of cars and planes.
- **Protect yourself from sources of air pollution:**



Look **inside** your home:

- 'scented candles, deodorants, gas hobs and wood-burning stoves possibly do as much damage as diesel 4x4s' (Times, 2018)



Protect yourself **outside**:

- Avoid busy roads where possible.
- Wear anti-pollution masks (must be tight-fitting).



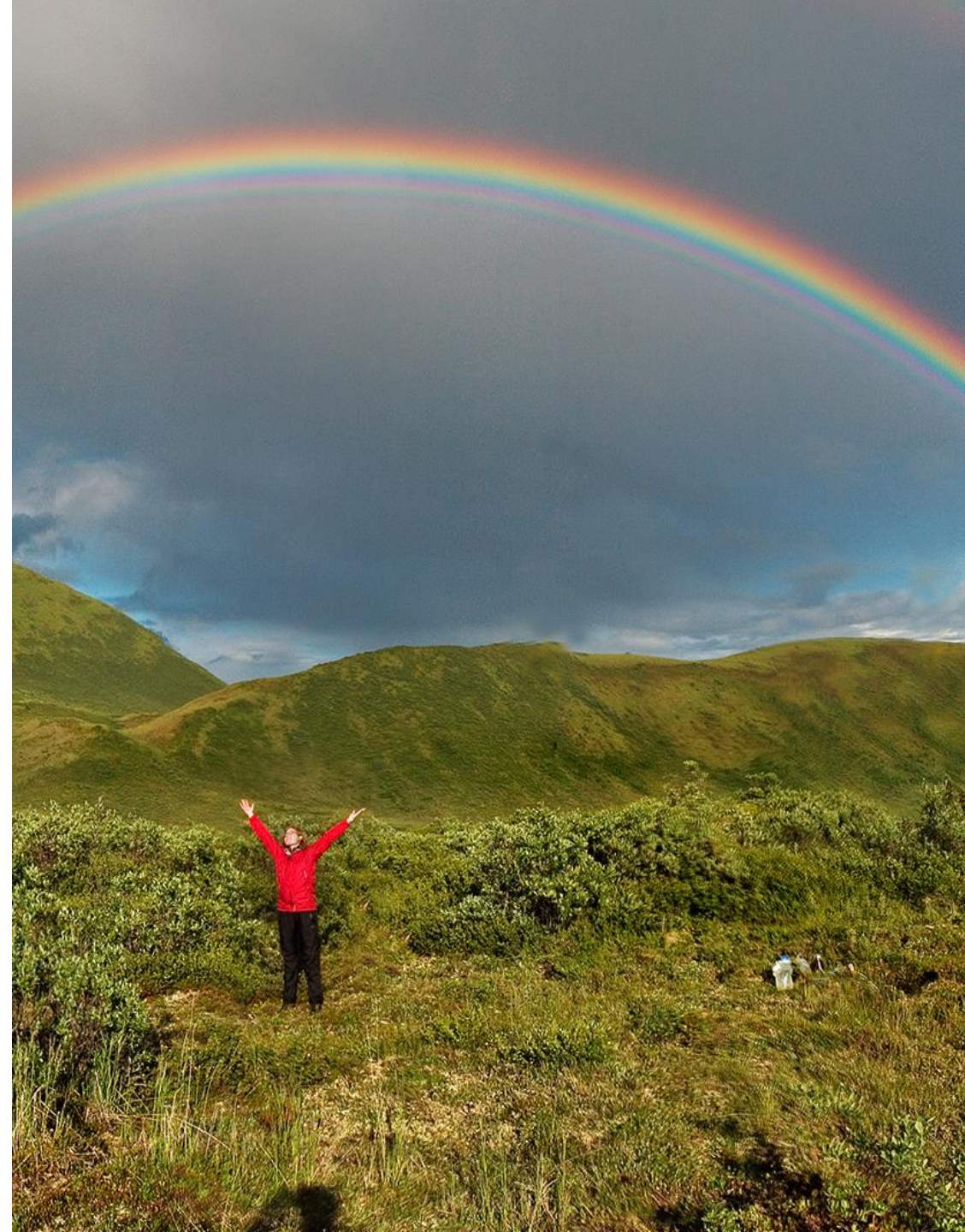
Summary

- **Intersections:**
 - **Risk** factors *and* **wider** factors that affect [human] health and experiences.
 - Need **intersecting responses!**
 - At **individual, community and social** (government, global) levels.
 - Role of the **media?**



Dementia Futures...

...are **intertwined** with more environmentally sustainable and socially inclusive futures!



Thank you for listening!

Do you have any questions?

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