

Age UK's Loneliness Heat Map

Questions & Answers

1. What is loneliness?

Loneliness is a negative emotion associated with a perceived gap between the quality and quantity of social relationships that we have and those that we want. It is a subjective experience.

2. Why is loneliness important?

Most people experience loneliness at some point in their lives. For many people it will be transitory. For a growing number of older people loneliness defines and devastates their lives. It is a poor state of living when someone feels that they have no social relationships or those that they have are not what they wish them to be – it is continuing to have to live in a negative state of mind. Loneliness is also associated with depression, sleep problems, impaired cognitive health, heightened vascular resistance, hypertension, physiological stress and mental health problems.

3. What causes loneliness?

There have been several studies that have identified a range of factors associated with being lonely in older age. These factors include: **social networks** (living alone, being widowed, divorced or otherwise outside of marital or civil union, contacts with friends and family, social participation); **health** (unmet social care needs, poor health, mobility limitations, cognitive and sensory impairment), **individual characteristics** (age, ethnicity, sexual orientation, low income, retirement) and **neighbourhood characteristics** (structures of buildings and streets, provision of local amenities, territorial boundaries, area reputation, neighbourliness, material deprivation of area of residence).

4. What does Age UK's Loneliness Heat Map show? And why is one needed?

The Age UK Loneliness Heat Map shows the **relative risk of loneliness** across neighbourhoods in England. It should be used alongside local knowledge and an understanding of local neighbourhoods; when this happens it can improve the allocation of limited resources to reduce loneliness across a geographic area and help understand whether existing services are reaching areas of need. Age UK is not aware of any other heat map that attempts to show relative risk of loneliness amongst older people in England.

5. How has the Loneliness Heat Map been constructed?

The English Longitudinal Study of Ageing (ELSA), a representative longitudinal survey of people aged 50 or over living in the community in England, has been used to identify factors associated with an older person being *often* lonely. Age UK ran a model on data from Wave 5 of the survey that took place between 2010 and 2012, which included a sample of 6,773 older people (aged 65 and over). Identified factors that can also be found in the 2011 Census were selected. The Office of National Statistics National Wellbeing Team applied the results from our model, using only those factors for which Census 2011 data exists, on the individual records held in the 2011 Census Microdata files. This produced the relative likelihood of loneliness amongst those aged 65 and over at the following geographical areas: Output Area (OA), Lower Layer Super Output Area (LSOA), Middle Layer Super Output Area (MSOA) and Local Authorities (LA). Further details can be found in the report [*Predicting the prevalence of loneliness at older ages*](#)

6. What factors are identified as being associated with older people being *often* lonely using the ELSA, and which of these are available in the Census 2011?

The English Longitudinal Study of Ageing (ELSA) identified six factors as being statistically significantly associated with being lonely: **self-reported health status, marital status, household size, housing ownership, activities of daily living (ADLs) and multiple eye conditions**. The poorer your health, the smaller your household size (i.e. one-person household), having a mortgage (compared to outright ownership and renting), having difficulty with one or more ADL and being divorced, separated or widowed (compared to being married or in a civil partnership) are associated with an increased risk of being lonely. Gender, household income, employment status, hearing problems and having a pet are not statistically significantly associated with being lonely. The factors available in the Census 2011 were **self-reported health, marital status, household size and age**¹.

7. How do I use the Loneliness Heat Map? What does it tell me?

The Age UK Loneliness Heat Map shows the risk of loneliness across 32,844 neighbourhoods in England. The area of interest is chosen by clicking on or typing the name of the local authority, which then appears with ward boundaries. For each neighbourhood area within the chosen local authority a **relative risk of loneliness** is given. The loneliness risk is relative to all the neighbourhood areas in the chosen local authority. For each neighbourhood area, its relative loneliness risk against all neighbourhood areas in England is also provided. This means two neighbourhood areas within a local authority can both have the same relative risk of loneliness but their ranking against all neighbourhoods in England is substantially different².

¹Being in poor health indicates person is 10.1 times more likely to lonely than someone who is in excellent health; a person in fair health 5.9 times more likely and a person in good health 2.9 times more likely. Being widowed indicates a person is 3 times more likely to lonely than someone who is married or in a civil partnership; and a person divorced or single 1.7 times more likely. Being in a one person household indicates a person is 2.6 times more likely to lonely than a person who lives in a multi-person household. Being aged 75 to 79 indicates a person is 0.7 times less likely to be lonely than a person aged 65 to 69.

² For example, when viewing the relative risk of loneliness in the London Borough of Hounslow, there are two adjacent neighbourhoods that within the local authority have a very high risk of loneliness. However, one neighbourhood (O18F) is ranked 955 against all neighbourhoods in England and the other neighbourhood (O18C) is ranked 7,480 against all neighbourhoods in England

8. What are the limitations of the heat map constructed?

The heat map is only as good as the data available to construct the map. One limitation of the heat map is that not all factors that are associated with loneliness are available at Census 2011 level. Another limitation is that it is not known whether missing data introduces any bias in the statistical analysis. It is important to stress that the heat map shows the risk of loneliness, not actual cases of reported loneliness.

9. Do the limitations mean the heat maps are not useful?

No, the heat map is a useful tool that together with local knowledge and an understanding of local neighbourhoods, can improve the allocation of limited resources across a geographic area and can help us to understand whether existing services are reaching areas of need. It may highlight some areas which have not previously been considered.

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