



# Diagnosis Critical

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Launching an inquiry into health  
and social care in England

Methodology

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centre for  
**progressive  
policy**



## Risk Zone

For a local authority to be classified as a Risk Zone it must meet two conditions.

**Health outcomes that are below the English average.** Male life expectancy at birth is a conventional health outcome summary measure. It is highly correlated with female life expectancy at birth and produces the same results as male life expectancy at birth.<sup>1</sup> The data are from the Office of National Statistics and refer to 2012-14, the latest available data point.<sup>2</sup>

**One or more deficit-running NHS trusts.** Having matched NHS trusts to local authorities using postcode data, this is the sum of NHS trusts' deficits and surpluses relative to the sum of NHS trusts' turnover, within each local authority. The data refer to 2015/16, the latest available, and cover all acute and community trusts plus mental health and ambulance NHS and NHS foundation trusts.<sup>3</sup>

Out of England's 326 local authorities, 32 meet these two conditions and so are classified as Risk Zones. A full list of the Risk Zones is in the Appendix.

Why are they Risk Zones? There is a 29% difference in age-standardised mortality rates for causes considered avoidable, amenable and preventable between Risk Zones and all other local authorities.<sup>4</sup>

## Crunch Zone

For a local authority to be classified as a Crunch Zone it must meet two conditions.

**Elderly population-share above the English average.** This is the percentage of people 65 years old and over in the population. The data are from the Office of National Statistics and refer to 2016.<sup>5</sup>

**One or more deficit-running NHS trusts.** Defined as Risk Zones.

Out of England's 326 local authorities, 13 meet these two conditions and so are classified as Crunch Zones. A full list of the Crunch Zones is in the Appendix.

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1 Across England's 326 local authorities, the Pearson and Spearman rank correlation coefficients between male and female life expectancy at birth are both 0.92, significant at the 1% level. Regressing female on male life expectancy yields a coefficient of 0.80, significant at the 1% level, and an  $R^2$  of 0.84.

2 Office for National Statistics (2015) Dataset: Life Expectancy at Birth and at Age 65 by Local Areas in England and Wales. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/lifeexpectancyatbirthandage65bylocalareasinenglandandwalesreferencetable1>

3 NHS Improvement (previously Monitor), FOI release - FOI Trust financial data: Financial data for NHS trusts and foundation trusts from 2005-2014, published January 12, 2017. Available at: <https://www.gov.uk/government/publications/foi-trust-financial-data>

4 A regression of the ONS "Age-standardised mortality rates for causes considered avoidable, amenable and preventable by local authority in England and Wales, 2014 to 2016" data across 324 local authorities on the Risk Zone dummy indicator yields a coefficient of 74, significant at the 1% level, an F-statistic of 54.6, and an  $R^2$  of 0.14. The mean mortality rate for a non-Risk Zone is 259.4 and for a Risk Zone it is 333.4 per 100,000 persons.

5 Office for National Statistics (2016) Dataset: Population projections - local authorities: SNPP Z1. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandz1>

# Appendix

## Risk Zones

<b>lad15cd</b>	<b>Area name</b>
E06000002	Middlesbrough UA
E06000050	Cheshire West and Chester UA
E07000028	Carlisle
E08000003	Manchester
E08000008	Tameside
E08000010	Wigan
E08000011	Knowsley
E08000012	Liverpool
E08000014	Sefton
E06000010	Kingston upon Hull, City of UA
E08000016	Barnsley
E08000032	Bradford
E08000034	Kirklees
E06000016	Leicester UA
E06000018	Nottingham UA
E07000138	Lincoln
E06000021	Stoke-on-Trent UA
E08000025	Birmingham
E07000237	Worcester
E06000033	Southend-on-Sea UA
E07000243	Stevenage
E07000202	Ipswich
E09000019	Islington
E09000022	Lambeth
E09000028	Southwark
E06000035	Medway UA
E06000038	Reading UA
E07000107	Dartford
E06000028	Bournemouth UA
E06000052	Cornwall UA
E06000027	Torbay UA
E07000081	Gloucester

## Crunch Zones

<b>lad15cd</b>	<b>Area name</b>
E07000144	Broadland
E06000049	Cheshire East UA
E08000007	Stockport
E06000054	Wiltshire UA
E06000050	Cheshire West and Chester UA
E07000149	South Norfolk
E07000031	South Lakeland
E07000106	Canterbury
E08000014	Sefton
E06000051	Shropshire UA
E07000028	Carlisle
E06000027	Torbay UA
E06000052	Cornwall UA