Residents of the UK are twice as likely to die early if they live in deprived parts of England than the more affluent parts, a new analysis has revealed.

Rates of premature mortality were consistently higher in the 15 most deprived parts of the country compared to the 15 least deprived. The new findings show that the leading cause of death in the UK was heart disease in 2016, with rates two times higher in men than women. Lung cancer came second and stroke was third. Self-harm was the third leading cause of early deaths among men, according to the study published Wednesday.

Half of all early deaths across the country that same year were due to behavioral risk factors such as tobacco, bad diets, alcohol and drug use, obesity and high blood pressure.

The team of UK scientists behind the study hope the data will help policy makers manage resources and priorities to the level of burden and risk factors in different regions, with more appropriate interventions to improve diets and lower rates of smoking.

The analysis is based on data from the Global Burden of Disease estimates for the UK on years of life lost, years lived with disability, and disability-adjusted life-years from 1990 to 2016 for England, Wales, Scotland and Northern Ireland, and 150 English Local Authorities. This aim was to identify "where are people dying younger than they should be" and for what reasons, said Nicholas Steel, the study leader and a professor of public health at the University of East Anglia.
The analysis of 150 local authorities showed a "startling disparity" in premature deaths across the UK. "I think we should all be concerned at the level of inequality that still exists across the UK," Steel told CNN.

'Stubborn health gap between rich and poor'

Previous evidence has shown that more deprived areas have higher rates of smoking or alcohol use. Professor John Newton at Public Health England, who contributed to the study, explained that the underlying reasons for higher risk factors in those parts of the country are linked to people's experience as children, their education, opportunities to have healthy work, housing quality and access to green spaces. "There's a whole range of things that lie behind the easy targets of smoking and obesity," said Newton.

But some areas with the same level of deprivation showed different outcomes. London's borough of Tower Hamlets, for example, had better health outcomes than other areas with similar conditions, like the city of Liverpool in the north of the country, identifying the need for city-specific actions to respond to the problem.

Northern Ireland had particularly high rates of anxiety disorders, which the authors believe stem from the country's legacy of conflict. Premature mortality was also higher in Scotland than in England.

Another new finding researchers noted was the "big shift of morbidity" -- conditions that won't kill but cause a lot of suffering, such as mental health problems, back and neck pain. These were previously not treated as a priority by the UK's National Health Service explained Steel, "but this new information suggests they should be."

The leading causes of ill health in 2016 were low back and neck pain, skin and subcutaneous diseases, migraine, and depressive disorders, the study found. These conditions "are huge causes of disability in the UK," said Steel.

Newton highlighted the ever-increasing impact of living with poor health. "As we work to develop the NHS long term plan, actions tackling the social and structural drivers of ill health are needed if we're to improve the stubborn health gap between rich and poor areas of the country," he said.

Global slow down

Between the period of 1990 to 2016 British life expectancy improved, but the rate of this started slowing down from 2010 onwards. The study suggests this is
due to a slower rate of improvement since 2010 in some causes of death, such as heart diseases, colorectal cancer, lung cancer, and breast cancer.

**Tall people at greater risk of cancer, study says**
Steel highlighted that the slow-down in health improvement since 2010 is a global problem, particularly affecting the USA, which he said had the "biggest problem" in health improvement. "Nearly all European countries have a similar problem. This is an international picture of year on year improvements in life expectancy stalling around 2010 and 2011," he explained.

Newton stated that globally the UK is doing "very well" but compared to its peers it is ranked in the middle of the pack. "Our progress seems to be slipping back a little," he said, adding that some reasons for this are poor outcomes in respiratory diseases and some cancers like lung cancer.

**Opportunity to improve**

The ten biggest causes of premature death -- including tobacco use, unhealthy diet, obesity, alcohol, drug use, low physical activity, and environmental factors, such as air pollution -- ranked similarly across the UK.

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The "opportunity to prevent these problems is huge," said Newton. "What this study has done is quantify the opportunity of prevention and it's really quite staggering."

Newton explained that Public Health England will be able to create more coordinated and effective strategies to deal with these problems thanks to the data examining local health outcomes.

On a national level Newton believes there is a lot to be done on tobacco control and reformulating the nation's diet to contain healthier foods.

With regard to the rise in morbidity, Newton said, "if we can improve that, that would make a huge difference" to people's lives and to lessen the burden on the UK's health care services.