

1 ALL DEATHS

This category includes *all* deaths in Britain (England, Scotland and Wales) between 1981 and 2004 inclusive.

14,833,696 cases
 100% of all deaths
 average age = 74.4
 male:female ratio = 48:52

The map of mortality rates from all causes combines in a single image all the influences on our survival. Having taken into account the distribution of the population according to age and sex, the map shows that across these areas a person's chances of dying in a particular year varied from being more than 50% above the national average (an SMR of 150 as shown on the key) to less than 76% of the national average (with SMRs ranging from 71 to 76 in the lowest mortality category). Thus, depending on where you were living over the last quarter of a century, there are neighbourhoods of Britain containing populations of tens of thousands of people where you were more than twice as likely to die than had you lived in other places.

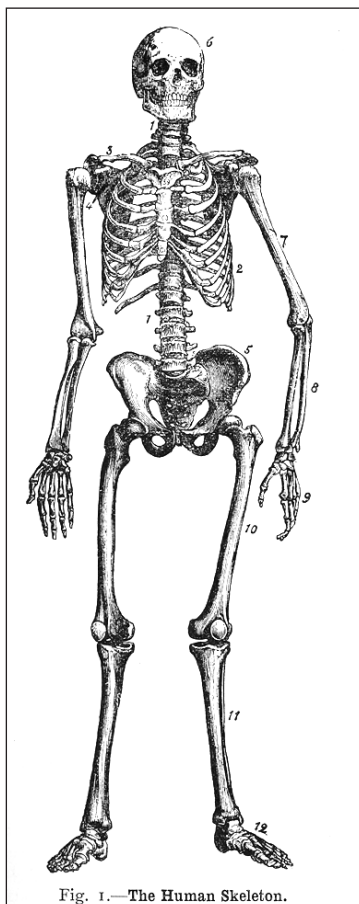
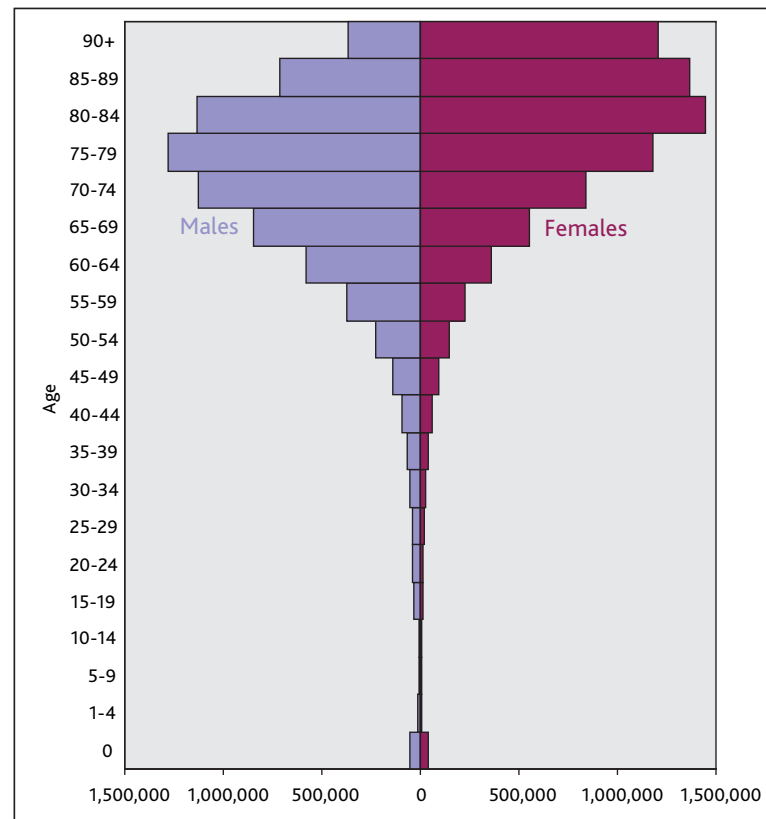


Fig. 1.—The Human Skeleton.

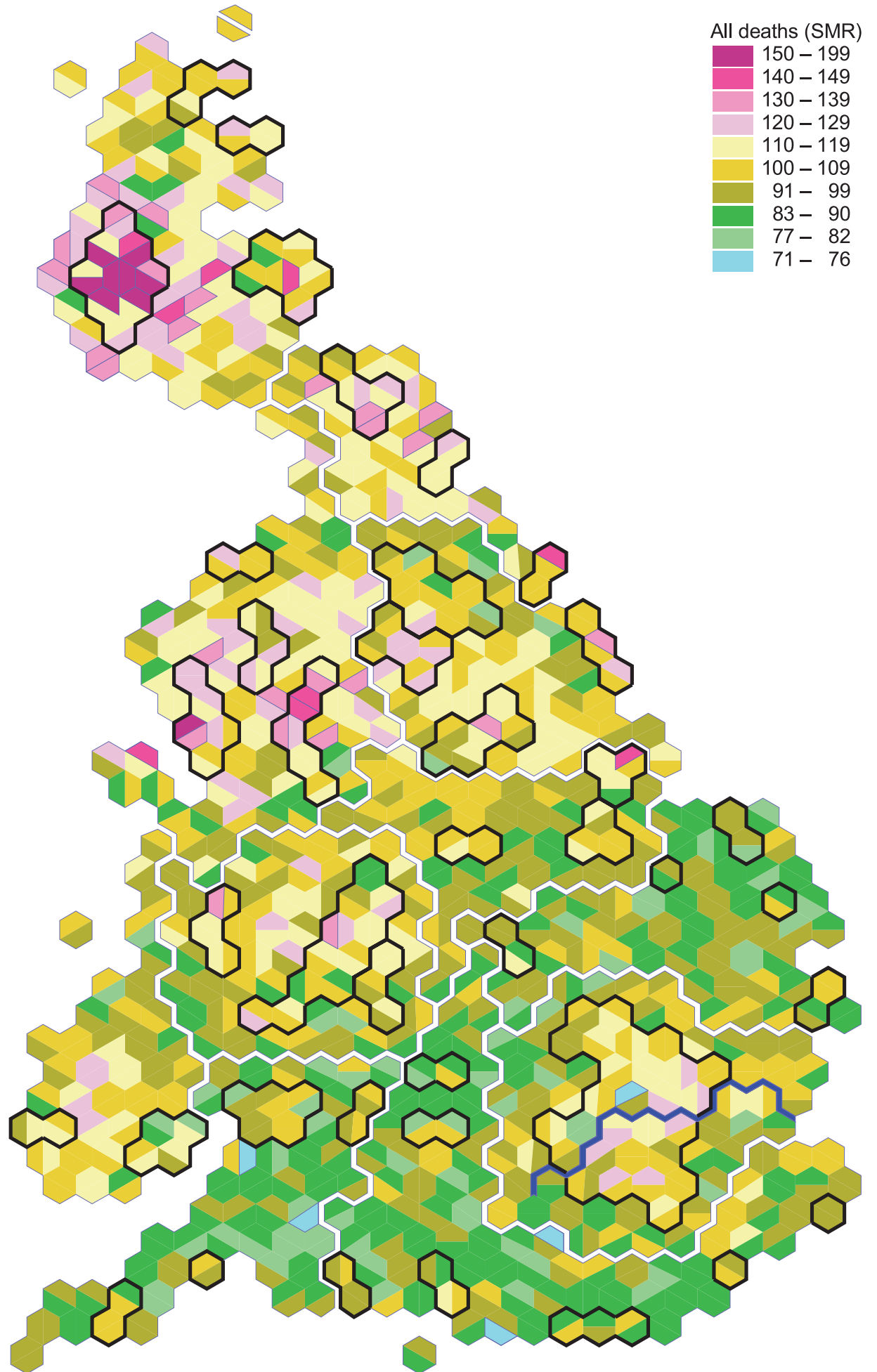
The 1,282 neighbourhoods shown here both physically and statistically collect groups of people together whose rates of dying vary considerably at the extremes. For the large majority in the middle, however, living in the areas with an SMR between 90 and 110, mortality rates do not appear to vary greatly. However, before concluding that this variation is low it is worth remembering that it is compound. If every year in certain towns in Britain an extra 10% of the population die than on average, whereas in another some 10% fewer die than you would expect given their ages and sexes, then the life expectancies of people in those two towns will diverge by several years.



Across much of the south of England outside London, and in a few isolated enclaves of prosperity in the north, Wales and Scotland, people's chances of dying each year have been at least 10%, often 20% and at the extremes almost 30% lower than average since 1981.

Over this 24-year period, the average age of death in Britain was 74.4 years, 71.2 for men and 77.4 for women. The average age of death in our neighbourhoods varied between 66.4 years (in Glasgow Easterhouse) and 80.6 years (in Eastbourne West). These are averages. The lower figures are due to many people dying much younger; the higher due to many people living longer. Over this period 42.0% of people who died were over 80 years old, while 12.4% were under 60 years old. In the worst neighbourhood 25.0% were under 60 years old.

MAP 1 ALL DEATHS



18 ASSAULT BY CUTTING

This cause of death comes under the 'external' causes of death category (see Map 5) and falls into the sub-category of 'Homicide and injury purposely inflicted by other persons', along with a range of other methods of murder/assault, such as use of firearms or poisoning. See also Map 39 Suicide/undetermined by cutting.

2,645 cases

0.02% of all deaths

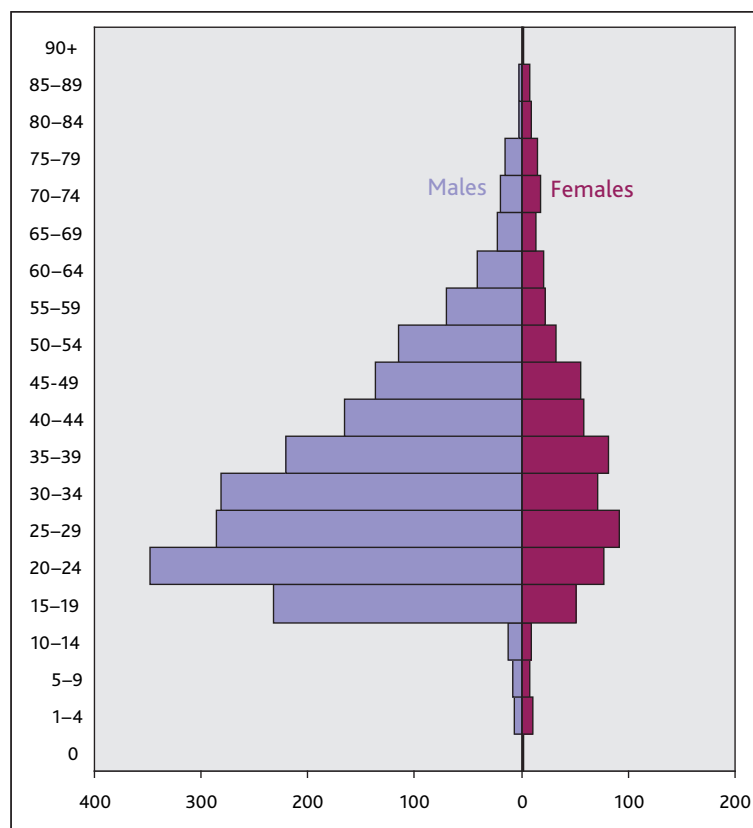
average age = 34.8

male:female ratio = 75:25

Three quarters of those who have died due to this cause are males. As the age–sex bar chart shows, younger males are at a much higher risk. The rates in Glasgow and the south west of Scotland are immediately striking. London and other English urban centres follow with the next highest SMRs. Much of the remainder of rural and provincial Britain has substantially lower rates.

This cause of death includes killing by cutting or stabbing using a sharp object, most commonly a knife or broken glass. It includes killing which may be intentional or unintentional; many of these assaults are impulsive, related to alcohol and drug misuse, and assailants use whatever weapon is to hand. Often the knife used is a kitchen knife in a domestic incident. Women are more commonly murdered by their partners. Men are more commonly murdered by someone to whom they are unrelated.

Blunt-ended table knives were introduced in the 18th century to reduce the injuries resulting from arguments over the dinner table in public eateries (Hern et al, 2005). Many domestic kitchen knives, however, are of the dagger variety with a pointed tip and they often have a long blade. In contrast to a knife with a short blade these can penetrate deeply and can easily cause serious injury or death. Hern and colleagues argue that there is no culinary necessity for knives of this type and that banning them would drastically reduce their availability and therefore their use in personal attacks.



Broken drinking glasses and bottles are also used as weapons, often in fights in public places where alcohol has been consumed. This is known as 'glassing' and can lead to severe facial injuries. In these situations the assault and any resulting homicide is usually unplanned: the intention may be to cause injury, but not necessarily to kill.

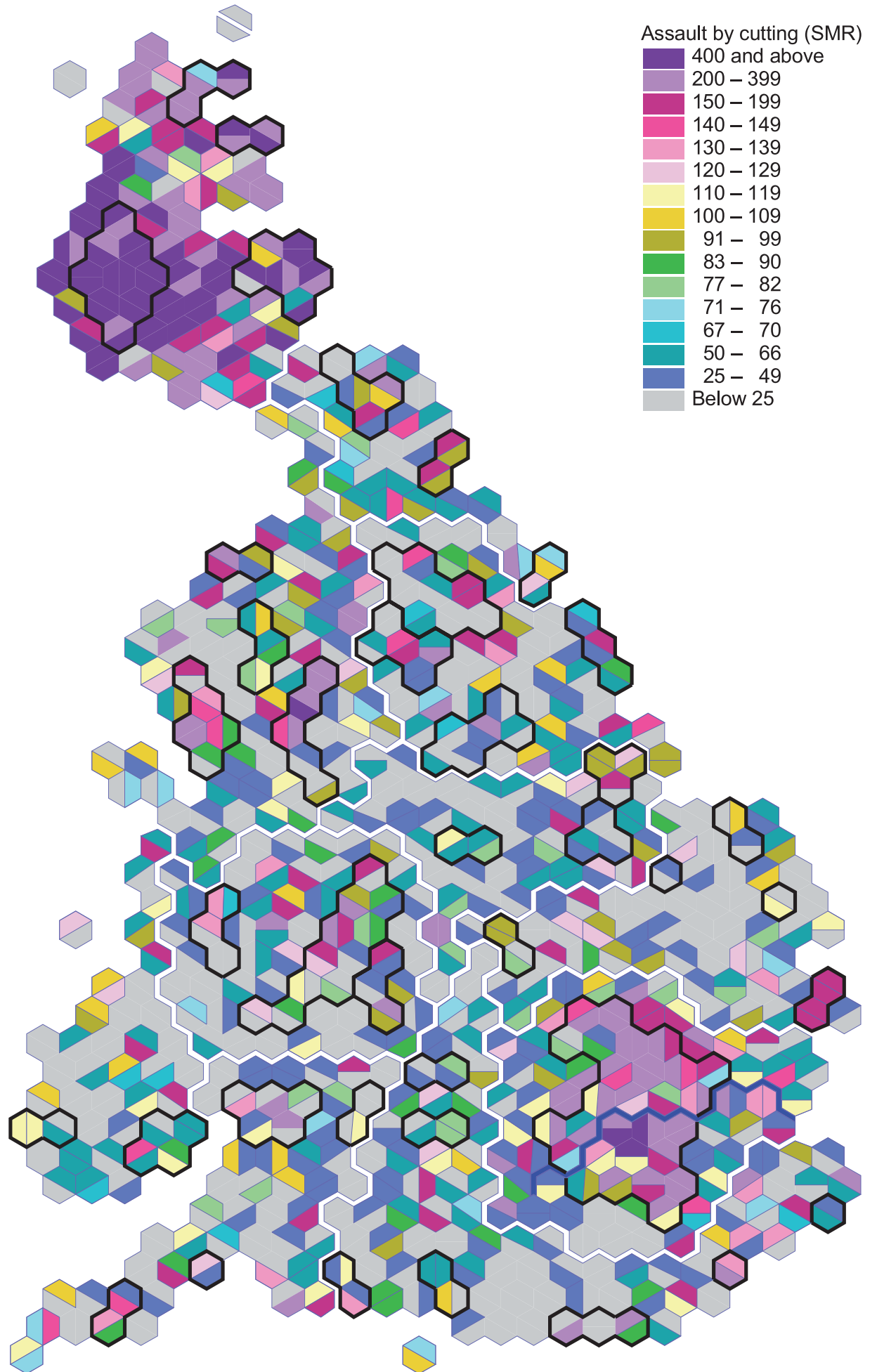
Hern, E., Glazebrook, W. and Beckett, M. (2005) 'Reducing knife crime', *BMJ*, no 330, pp 1221-2.

ICD-9 codes: E966

ICD-10 codes: X99

ICD-9	ICD-9 name	% of cases	ICD-10	ICD-10 name	% of cases
E966	Assault by cutting and piercing instrument	100.0	X99	Assault by sharp object	100.0
		100.0			100.0

MAP 18 ASSAULT BY CUTTING



41 PEDESTRIAN HIT BY VEHICLE

This category includes deaths to pedestrians due to collision with a vehicle of some kind.

See also Map 25 Pedal cyclist hit by vehicle, and Map 22 Motor vehicle accidents, which covers the deaths of the occupants of motor vehicles and motorcyclists.

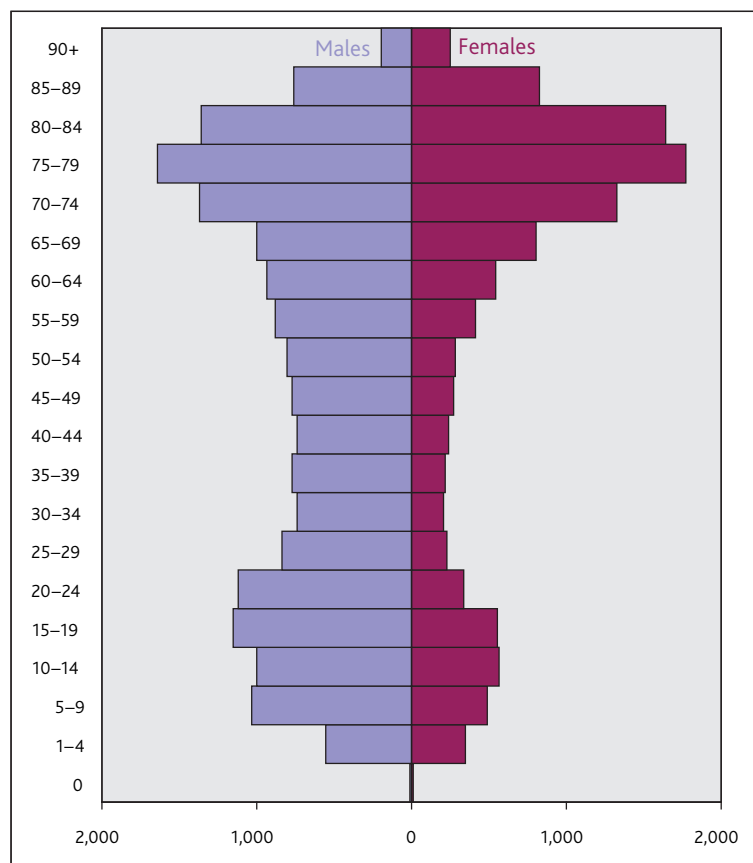
29,008 cases
 0.20% of all deaths
 average age = 51.8
 male:female ratio = 61:39

The highest SMRs are found in urban areas, while rural south west England has the lowest rates. Contrast this with Map 22, which covers the deaths of those who are drivers or passengers: on that map, the highest SMRs are found in rural areas.

The age distribution for this cause of death is unusual in that for both men and women there are two peaks – in the teenage years/ early 20s and later in the 70s and 80s (see age–sex bar chart). The peak in the younger age group is likely to reflect activity patterns – going out a lot and perhaps also not observing the Green Cross Code of their childhood. The more children are sheltered from cars when they are young, the less experience they will have of dealing with them; there is a tendency to blame victims of the road for their early deaths. The peak for the older age groups indicates the vulnerability of older people – they can generally move less quickly and their bodies are more fragile and less likely to heal.

For each mile travelled there are nearly 30 times more child pedestrian deaths than there are deaths to child car occupants (Sonkin et al, 2006). The children who are more likely to be pedestrians are those from lower-income families who are less likely to have a car. Strategies to reduce the number of pedestrian deaths include education, 20mph speed limits and speed bumps.

Philosopher Roland Barthes died from this cause.



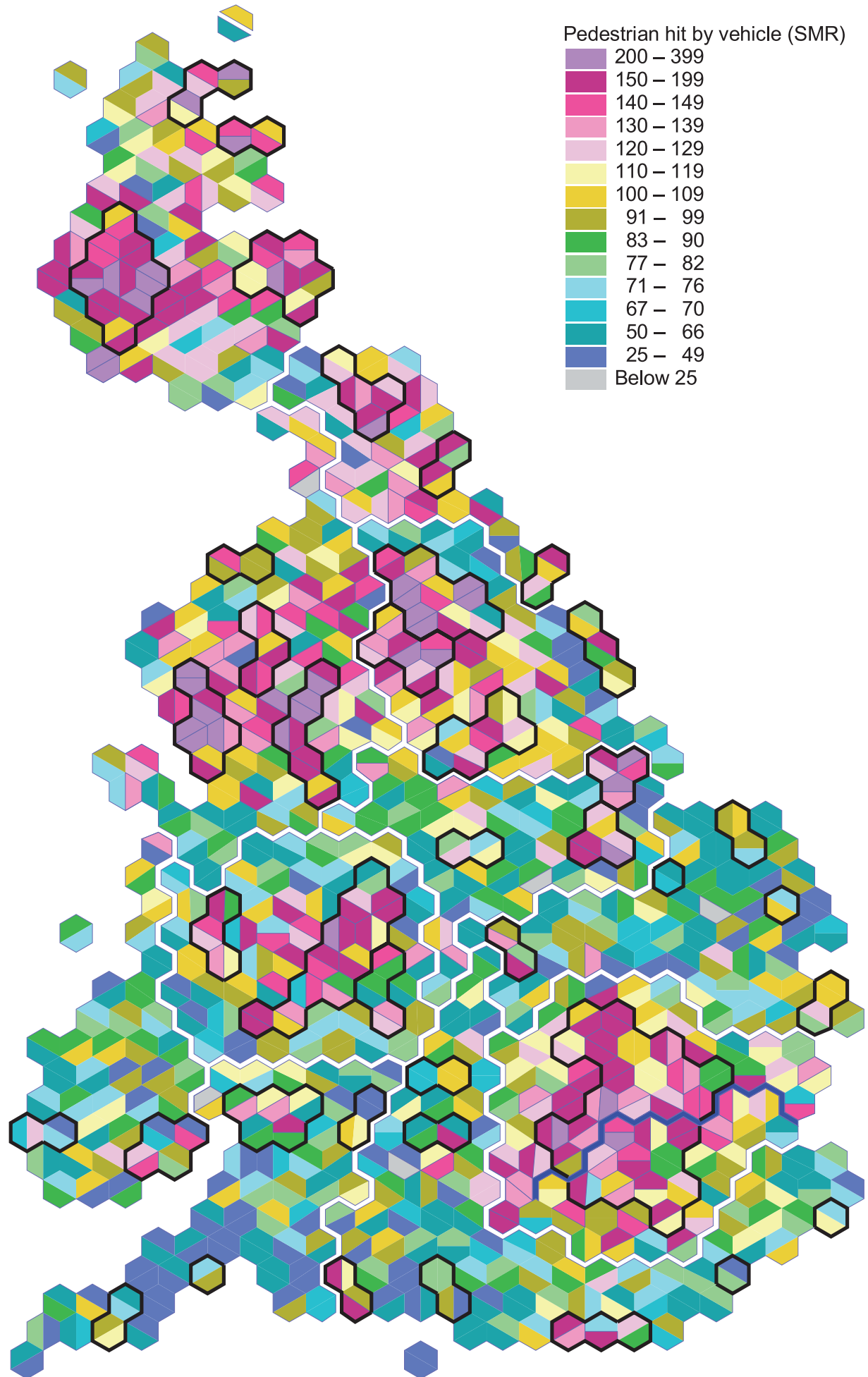
Sonkin, B., Edwards, P., Roberts, I. and Green, J. (2006) 'Walking, cycling and transport safety: an analysis of child road deaths', *Journal of the Royal Society of Medicine*, no 99, pp 402-5.

ICD-9 codes: E812.7, E813.7, E814.7, E815.7, E816.7, E817.7, E818.7, E819.7, E821.7, E822.7, E823.7, E824.7, E825.7, E826.0

ICD-10 codes: V01-V04, V06, V09.0-V09.3

ICD-9	ICD-9 name	% of cases	ICD-10	ICD-10 name	% of cases
E814.7	Motor vehicle traffic accident involving collision with pedestrian – Pedestrian	97.1	V03.1	Pedestrian injured in collision with car, pick-up truck or van – Traffic accident	49.0
			V04.1	Pedestrian injured in collision with heavy transport vehicle or bus – Traffic accident	17.1
			V09.2	Pedestrian injured in traffic accident involving other and unspecified motor vehicles	14.9
			V09.3	Pedestrian injured in unspecified traffic accident	9.7
	Other causes in group	2.9		Other causes in group	9.3
		100.0			100.0

MAP 41 PEDESTRIAN HIT BY VEHICLE



54 SKIN CANCER

This is a sub-category of all cancer deaths (see Map 7) and includes only the form of skin cancer known as malignant melanoma.

See also Other neoplasms (Map 61), which includes other forms of skin cancer.

32,884 cases

0.22% of all deaths

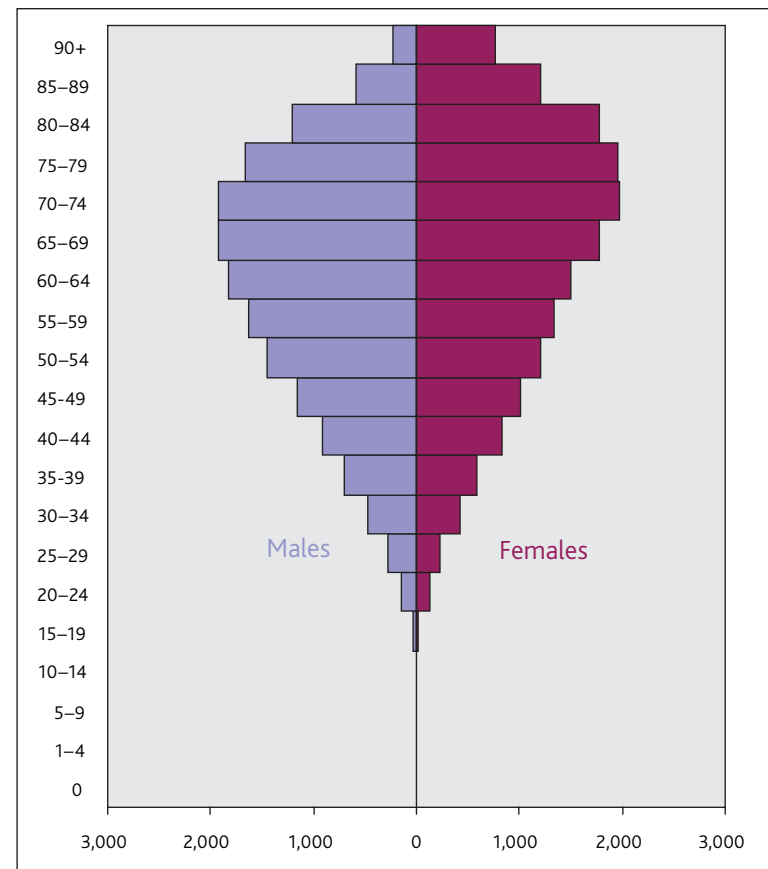
average age = 63.4

male:female ratio = 49:51

There is an obvious north-south divide on the map, with a gradient from higher rates on the south coast to lower rates in northern parts. This probably reflects the British climate, and also where those who can afford to holiday in the sun reside.

Malignant melanoma, the form of skin cancer that we map here, is the most serious type of skin cancer as it can spread to other parts of the body. The leading cause of skin cancer is over-exposure to sunlight. Rates have been increasing in recent years, thought to be due to increasing numbers of people taking increasing numbers of holidays abroad, and the popularity of the 'tanned look' and the use of tanning booths and sun lamps to achieve that look.

Skin cancer is very evenly distributed between males and females (see age-sex bar chart) although the age distributions are slightly different. For both males and females mortality increases incrementally with age until the 70s, reflecting, possibly, accumulated sun exposure over the life course.

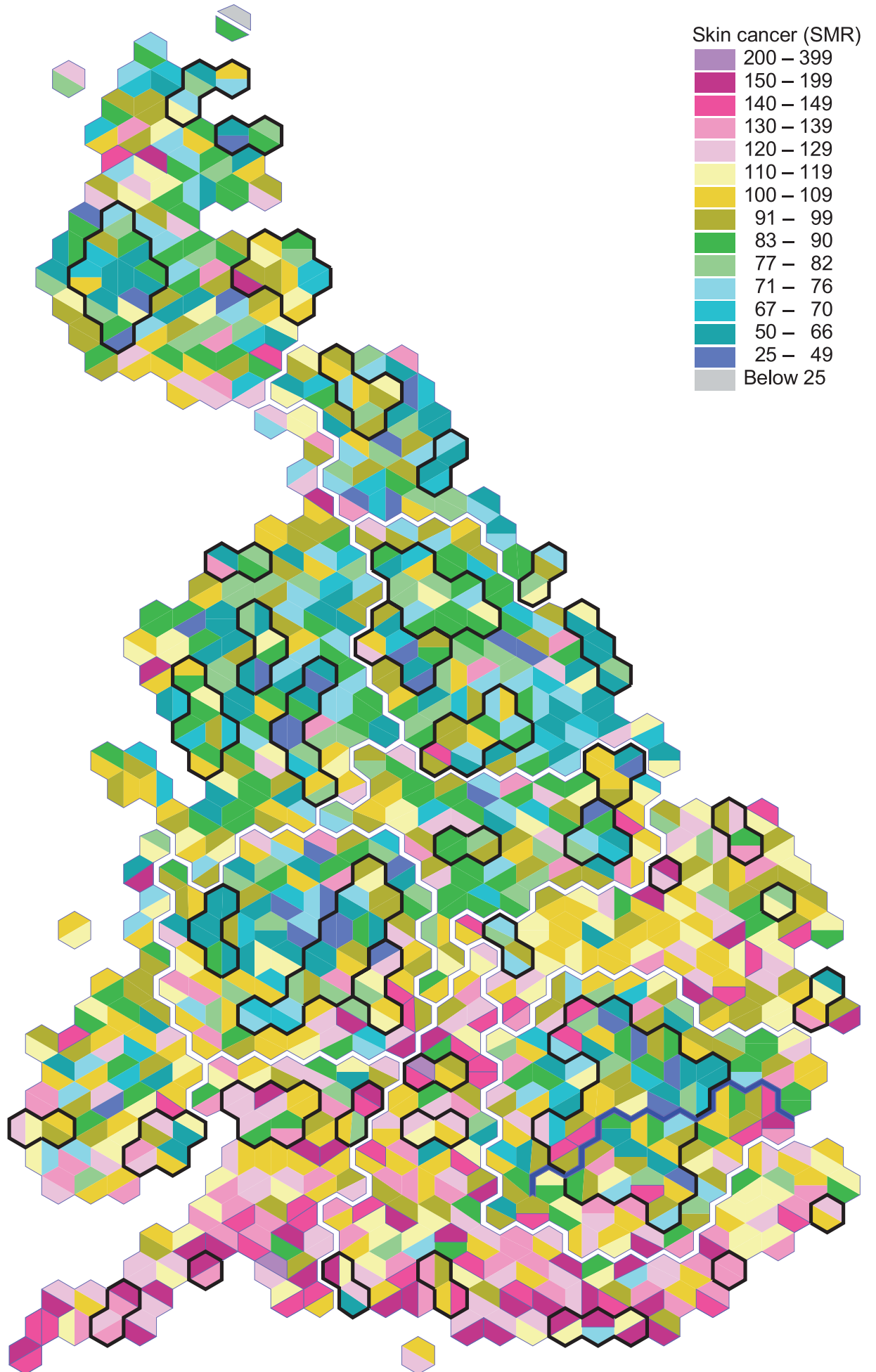


ICD-9 codes: 172

ICD-10 codes: C43

ICD-9	ICD-9 name	% of cases	ICD-10	ICD-10 name	% of cases
172	Malignant melanoma of skin	100.0	C43	Malignant melanoma of skin	100.0
		100.0			100.0

MAP 54 SKIN CANCER



MAP 68 LUNG CANCER

