Median age at death, Australia, 2013 to 2017

Findings

Background

The median age at death is an indicator of premature mortality. It is the age at which exactly half the deaths registered in a given time period were deaths of people above that age and half were deaths below that age.

Overall

In Australia, over the five years 2013 to 2017, the median age at death:

- was 78 years for males and 84 years for females;
- varied little between the capital cities and the areas outsde of the capital cities, other than in the Northern Territory, with a ten-year gap between Darwin (a median age at death of 69 years) and the Rest of NT (59 years);
- showed considerable variation for males and females, with the ages for males between five and seven years below those for females in all but the Northern Territory; and
- in both Darwin and the Rest of NT, the gap between the male and female median ages at death (of just two years lower for males) was relatively small, being around one third of that in the states, indicating the relatively poorer outcomes for females in the Northern Territory.

Geographical variation

The geographic distribution of the population by their median age at death at the small geographical area reveals major varitions across Australia, with people:

- in coastal areas, in the capital cities and other major urban centres generally living the longest (having the oldest median age at death);
- people living in regional and remote areas, along with some socioeconomically disadvantaged areas in the capital cities, having among the shortest lives.

The overall gap at the geographical level at which data were analysed is 41 years, from a median age at death of 48 years in the APY Lands in north-west South Australia, to 89 years in Ashburton in Melbourne, Victoria. A relatively small number of rural areas have similarly older median ages at death to that in Ashburton.





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Median age at death, Australia, 2013 to 2017

Background

The median age at death is an indicator of premature mortality. It is the age at which exactly half the deaths registered in a given time period were deaths of people above that age and half were deaths below that age.

Overview for Australia

In Australia, over the five years 2013 to 2017, the median age at death was 78 years for males and 84 years for females.

The median age at death varies little between the capital cities and the areas outsde of the capital cities (referred to as Rest of States/ NT), other than in the Northern Territory, with a ten-year gap between Darwin (a median age at death of 69 years) and the Rest of NT (59 years) (Table 1). Among the states, only Western Australia, with a gap of four years, and South Australia, with a gap of two years, has a gap of more than a single year.

There is, however, considerable variation in the median age at death for males and females, with the ages for males between five and seven years below those for females in all but the Northern Territory. In both Darwin and the Rest of NT, the gap between the male and female median ages at death (of just two years lower for males) was relatively small, being around one third of that in the states, indicating the relatively poorer outcomes for females in the Northern Territory.

Table 1: Median age at death, by sex and Section of state/ territory, 2013 to 2017

Section of state	Males		Females		Persons	
	Number of deaths	Median age (years)	Number of deaths	Median age (years)	Number of deaths	Median age (years)
Greater Capital Cities	232,142	79.0	229,500	85.0	461,642	82.0
Rest of States/ NT	166,250	78.0	149,117	84.0	315,367	81.0
New South Wales	134,197	79.0	128,591	85.0	262,788	82.0
Greater Sydney	70,946	79.0	70,259	85.0	141,205	82.0
Rest of New South Wales	62,780	78.0	58,087	84.0	120,867	81.0
Victoria	96,940	79.0	96,163	85.0	193,103	82.0
Greater Melbourne	64,532	80.0	65,225	85.0	129,757	82.0
Rest of Victoria	32,113	79.0	30,800	85.0	62,913	82.0
Queensland	77,902	77.0	69,730	83.0	147,632	80.0
Greater Brisbane	32,908	77.0	31,910	84.0	64,818	81.0
Rest of Queensland	44,580	77.0	37,587	83.0	82,167	80.0
South Australia	33,690	79.0	33,412	85.0	67,102	82.0
Greater Adelaide	24,361	80.0	25,299	85.0	49,660	83.0
Rest of South Australia	9,250	78.0	8,069	84.0	17,319	81.0
Western Australia	37,659	77.0	33,323	84.0	70,982	80.0
Greater Perth	28,316	78.0	26,293	84.0	54,609	81.0
Rest of Western Australia	9,048	74.0	6,904	81.0	15,952	77.0
Tasmania	11,647	77.0	11,281	83.0	22,928	80.0
Greater Hobart	4,596	78.0	4,794	84.0	9,390	81.0
Rest of Tasmania	7,017	77.0	6,458	83.0	13,475	80.0
Northern Territory	3,267	63.0	2,319	65.0	5,586	63.5
Greater Darwin	1,666	68.0	1,029	70.0	2,695	69.0
Rest of Northern Territory	1,462	58.0	1,212	60.0	2,674	59.0
ACT/ Greater Canberra	4,817	77.0	4,691	84.0	9,508	81.0

Median age at death by Population Health Area

See Box, Caveats re median age at death by small geographic area, below, for important notes on this measure when used for small geographical areas

The maps in this section (also available for males and females and for a range of geographical areas here) illustrate differences in the median age at death by Population Health Area (PHA¹). The maps show the broad view across Australia; separate reports provide the same information for Sydney and Adelaide and for Western Australia, outside of Perth and for the Northern Territory, outside of Darwin. The same maps can be viewed for other areas (e.g., for each capital city, regional area and state and territory) at the link above.

An additional report provides a sumary of the findings from the analysis by Indigenous status: the Indigenous status atlases can be viewed <u>here</u>, the data <u>here</u> and the summary report <u>here</u>.

Caveats re median age at death by small geographic area

People move address over time; for example, they move within a city, between cities, or from rural areas to regional and coastal towns. Aboriginal and Torres Strait Islander people also move in these ways, as well as in many instances moving from a remote community to live near larger centres providing health services that they need.

As a result, calculating the median age at death for those who died in an area does not necessarily reflect the true circumstances had people born in an area stayed there over their whole life. For example, the location in an area of above-average concentrations of residential aged care places can impact on the comparisons. Similarly, mining towns with predominantly young populations will have relatively few deaths, but those that occur will be at a lower median age than in the population at large. The <u>population pyramid generator</u> allows you to view the age pofiles of different geographical areas; an example for a mining town, Mount Newman, compared with regional Western Australia as a whole, can be seen <u>here</u>.

What this measure does show is that there is a strikingly clear gradient in age at death from urban to regional and remote areas, a gradient also evident in deaths before 75 years of age (premature mortality).

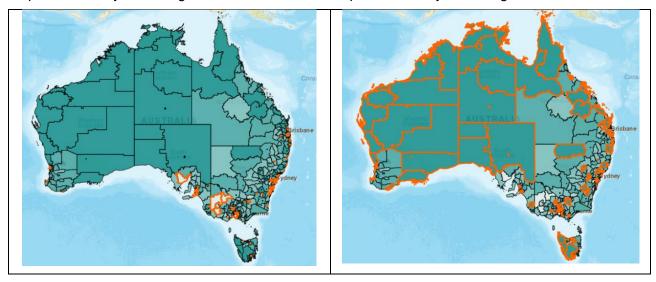
Further information as to the calculation of median age can be found here.

The geographic distribution of the population by the median age at death in each Population Health Area reveals major varitions across Australia, with people in coastal areas, in the capital cities and other major urban centres² generally living the longest (having the oldest median age at death: Map 1, orange highlights). People living in regional and remote areas, along with some socioeconomically disadvantaged areas in the capital cities (which cannot be seen at this scale, but are viewable online at the links above), have among the shortest lives (Map 2 highlights).

The overall gap at the PHA level is 41 years, from a median age at death of 48 years in the APY Lands in north-west South Australia, to 89 years in Ashburton in Melbourne, Victoria. A relatively small number of rural areas have similarly older median ages at death to that in Ashburton.

¹ PHAs are based on the 2016 Australian Statistical Geography Standard (ASGS) produced by the Australian Bureau of Statistics. Further details as to PHAs are available here.

² 'Other major urban centres are Newcastle and Wollongong in New South Wales, Geelong in Victoria and Gold Coast and Townsville in Queensland.



Progression in median age at death

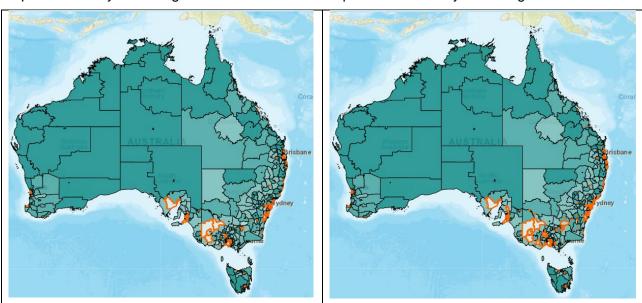
As noted above, the median age at death of Australians is strongly related to where people live. The following five maps start with the areas with the oldest median ages and progressively add younger ages at death. The data mapped are available here for PHAs, Local Government Areas, Primary Health Networks, quintiles of socioeconomic disadvantage and Remoteness Areas.

The first map shows deaths over 83 years of age which is, as noted above, largely an urban phenomenon, as the highest median ages are generally in the capital cities and other urban centres, predominantly in coastal areas. Although these areas cannot be seen at the scale in these maps, they can be seen by choosing the median age at death topic and filtering to the relevant capital city in the Single Map here). Other areas with a median age in this range evident at the scale in Map 3 are in Victoria and in South Australia – a mix of regional centres and rural areas.

Map 4 adds deaths at ages 82.5 to 83 years to those over 83 years, extending the higher median ages into regional centres, in particular along the eastern seaboard and in regional Victoria.

Map 3: 84 to 89 years of age at death

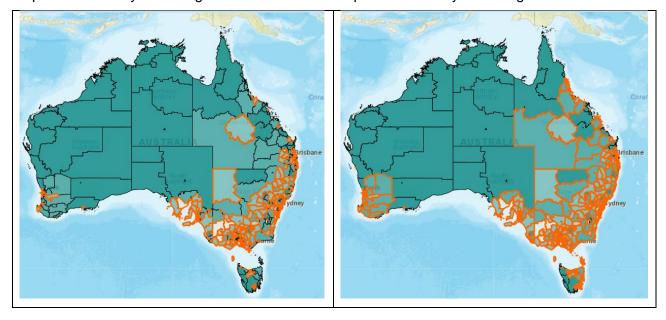
Map 4: 82.5 to 83.0 years of age at death added



³ Note that this will change the ranges, as only the PHAs in the selected capital city will be mapped; if you prefer to see the selected capital city in the context of median ages across the whole of Australia, rather than filtering to a capital city you can manually move to and zoom in on a capital city from the whole of Australia map.

Adding the next group, with deaths at 79.5 years to 82 years of age, extends these higher ages further into regional areas, as well as adding more inner, urban areas, although these are not discernible at this scale (Map 5): as noted above, more detail can be seen by choosing the median age indicator and filtering to the capital city of choice in the Single Map here). More regional areas are included, from Western Australia to the east coast of Australia when the next lowest ages are added (Map 6).

Map 5: 79.5 to 82 years of age at death added Map 6: 75.5 to 79 years of age at death added



The group with the lowest median ages, those from 48 to 75 years, covers the remaining remote areas of Australia, as well as some other areas with these very low ages, many of which are in the capital cities, other major urban centres and regional centres (Map 7). Map 8 repeats Map 2, showing just the areas with the lowest median ages at death.

Map 7: 48 to 75 years of age at death added

Map 8: 48 to 75 years of age at death

