## **Supplementary Figures and Tables**

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## Supplementary table 1 | Cause of death categories and ICD-10 codes

Category	Included ICD-10 codes
Perinatal conditions and congenital anomalies	P00-P99, Q00-Q99
2. Infectious diseases	A00-B99
3. Motor vehicle accidents	V02–V04, V09.0, V09.0, V09.2, V12–V14, V19.0–V19.2, V19.4– V19.6, V20–V79, V80.3–V80.5, V81.0–V81.1, V82.0–V82.1, V83– V88, V89.0, V89.2
4. Firearm related deaths	W32-W34, X72-X74, X93-X95, Y22-Y24, Y35.0
5. Other external causes	V01-Y89, excluding relevant codes in categories 3, 4, 6, and 7
6. Drug related deaths <sup>a</sup>	X40-44, X60-X64, X85, Y10-Y14
7. Alcohol related deaths <sup>a</sup>	E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, R78.0, X45, X65, Y15
8. Endocrine and metabolic diseases	E00-E99, excluding E24.4
9. Ischemic heart disease	120-125
10. All other circulatory diseases	100-100, excluding 142.6, 120-125
11. Influenza and pneumonia <sup>b</sup>	J09-J18
12. All other respiratory diseases <sup>b</sup>	J00-J98, excluding J09-J18
13. Lung cancer <sup>c</sup>	C33-C34
14. Screenable cancers <sup>c</sup>	C18-C21, C50, C53, C61
15. All other cancers <sup>c</sup>	C00-D48, excluding C18-C21, C33-C34, C50, C53, C61
16. Mental disorders and nervous system diseases	F00-F99, G00-G99, excluding relevant codes in categories 7 and 17
17. Alzheimer's disease and related dementias	F01, F03, G30, G31, excluding G31.2
18. Residual (all other causes of death)	D50-D89, H00-H95, K00-K99, L00-L93, M00-M99, N00-N99, O00-099, R00-R99, excluding K29.2, K70, K85.2, K86.0, R78.0

Notes: The cause of death categories are mutually exclusive and exhaustive.

<sup>&</sup>lt;sup>a</sup> Combined into a single category in main text Figures 2 and 3

<sup>&</sup>lt;sup>b</sup> Combined into a single category in main text Figures 2 and 3

 $<sup>^{\</sup>rm c}$  Combined into a single category in main text Figures 2 and 3

## Supplementary table 2 | Subnational data and population summary statistics, six Anglophone countries

Country	Region	Year	No. units	Mean population	Median population	Min population	Max population	Total population
Australia	State/territory	2018	8	3,123,488	2,166,150	247,300	7,987,300	24,987,900
Canada	Province/territory	2018*	13	2,851,009	958,406	38,143	14,308,697	37,063,114
Ireland	Region	2016	8	595,233	463,189	292,301	1,347,359	4,761,865
New Zealand	Regional council	2018	16	251,708	148,127	31,326	1,304,958	4,027,329
United Kingdom	Region/country**	2018	12	5,536,296	5,539,675	1,881,641	9,133,625	66,435,550
United States	State	2018	51	6,415,048	4,468,402	577,737	39,557,045	327,167,434
Total			95	4,340,230	2,595,900	31,326	39,557,045	46,524,501

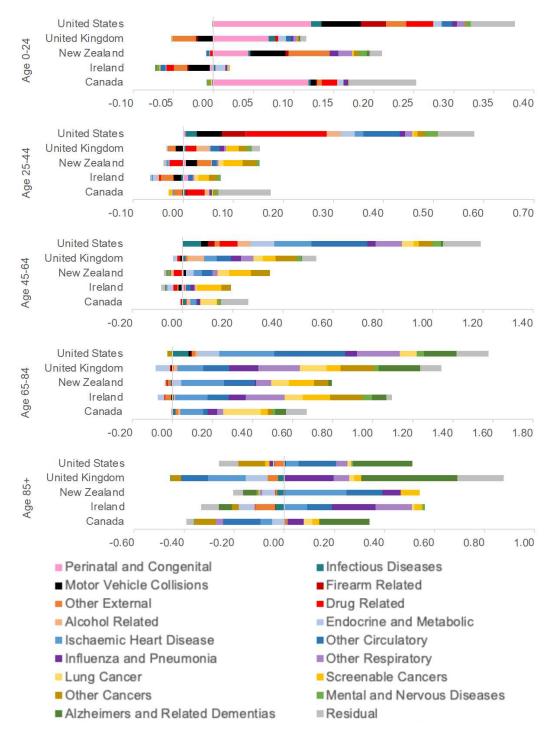
<sup>\*</sup>Data for Canadian provinces/territories in main text Figure 3 come from 2018 except for Yukon territory, which comes from 2016.

<sup>\*\*</sup>Includes 9 regions within England, plus the three countries of Scotland, Wales, and Northern Ireland.

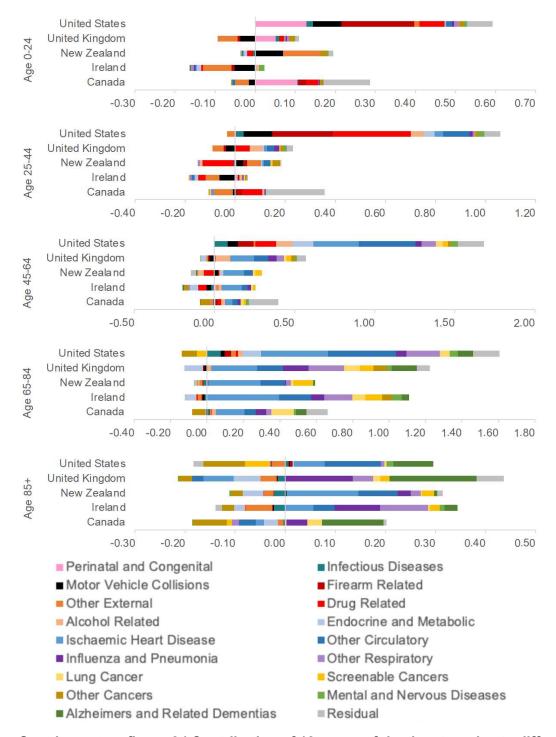
**Supplementary table 3**. Subnational variation in life expectancy at birth and at age 65 (years) for men and women in six Anglophone countries

J 1	Women						Men						
Country	Mean	SD	Median	Min	Max	Range	Mean	SD	Median	Min	Max	Range	
Birth													
Australia	84.38	1.66	84.88	80.60	85.55	4.96	80.09	1.97	80.57	75.55	81.75	6.20	
Canada	81.92	3.24	82.47	72.60	84.79	12.19	77.75	2.97	78.24	69.35	80.71	11.36	
Ireland	83.43	0.60	83.30	82.50	84.50	2.00	79.64	0.47	79.60	79.00	80.30	1.30	
New Zealand	83.09	1.06	83.12	80.57	84.50	3.93	79.49	1.17	79.41	76.79	81.21	4.42	
United Kingdom	82.93	1.09	82.71	81.14	84.69	3.55	79.23	1.20	78.89	77.16	80.92	3.76	
United States	80.72	1.57	81.10	77.30	84.00	6.70	75.70	1.84	76.00	71.70	78.40	6.70	
Age 65													
Australia	22.35	0.77	22.58	20.78	23.10	2.31	19.60	0.99	19.87	17.32	20.37	3.05	
Canada	20.71	2.41	21.57	14.00	22.77	8.77	18.47	1.10	18.56	16.20	20.02	3.82	
Ireland	20.94	0.44	20.90	20.30	21.70	1.40	18.34	0.31	18.35	17.80	18.70	0.90	
New Zealand	21.36	0.72	21.47	19.62	22.37	2.75	19.16	0.69	19.27	17.48	20.30	2.82	
United Kingdom	21.04	0.76	20.91	19.85	22.31	2.46	18.73	0.64	18.59	17.69	19.71	2.02	
United States	20.33	0.84	20.50	18.60	22.60	4.00	17.79	0.83	18.00	15.90	19.30	3.40	

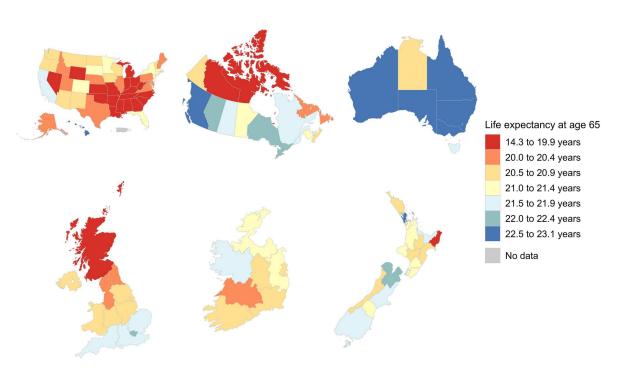
Notes: SD=standard deviation. Data are for 2018 except for Yukon territory (2014-2016), Nunavut territory (2016-2018), Northwest Territories (2016-2018), and Prince Edward Island province (2016-2018) in Canada and Ireland (2016).



Supplementary figure 1 | Contribution of 18 cause of death categories to differences in life expectancy at birth between 5 Anglophone countries and Australia by age group, women, 2018

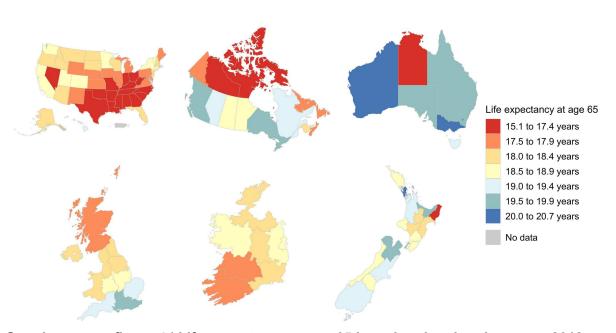


Supplementary figure 2 | Contribution of 18 cause of death categories to differences in life expectancy at birth between 5 Anglophone countries and Australia by age group, men, 2018



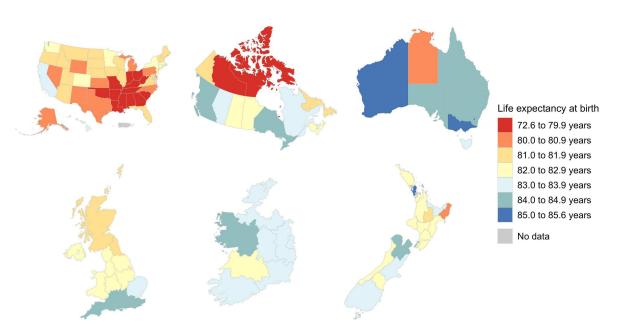
Supplementary figure 3 | Life expectancy at age 65 by subnational region, women, 2018 (varying years for Canada)

Note: Data are for 2018 except for Yukon territory (2014-2016), Nunavut territory (2016-2018), Northwest Territories (2016-2018), and Prince Edward Island province (2016-2018) in Canada and Ireland (2016).

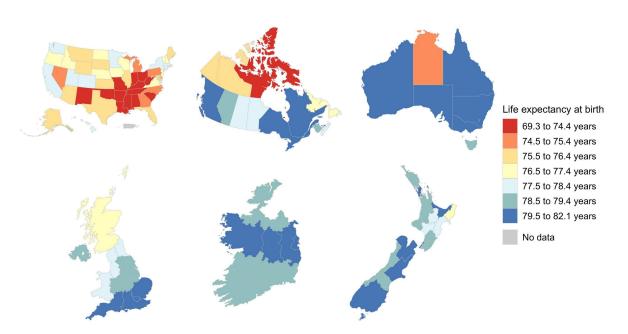


Supplementary figure 4 | Life expectancy at age 65 by subnational region, men, 2018 (varying years for Canada)

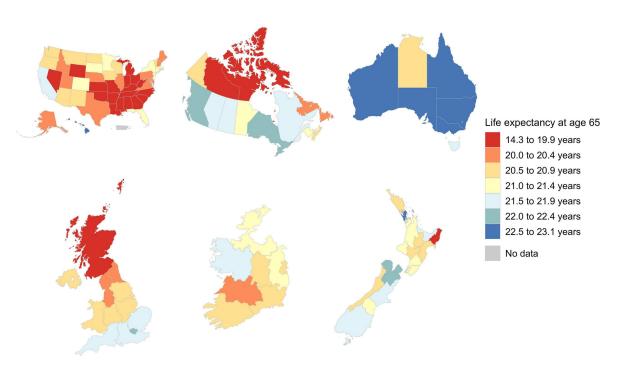
Note: Data are for 2018 except for Yukon territory (2014-2016), Nunavut territory (2016-2018), Northwest Territories (2016-2018), and Prince Edward Island province (2016-2018) in Canada and Ireland (2016).



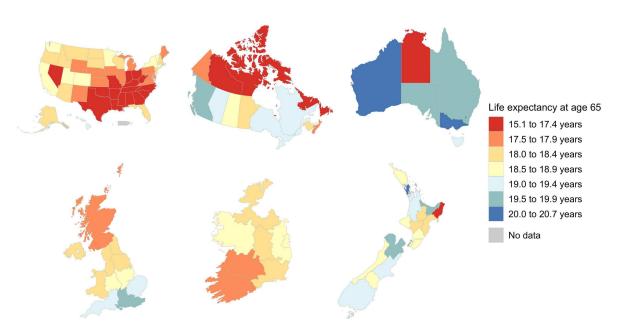
Supplementary figure 5 | Life expectancy at birth by subnational region, women, 2018 (2014-2016 for all Canadian provinces/territories)



Supplementary figure 6 | Life expectancy at birth by subnational region, men, 2018 (2014-2016 for all Canadian provinces/territories)



Supplementary figure 7 | Life expectancy at age 65 by subnational region, women, 2018 (2014-2016 for all Canadian provinces/territories)



Supplementary figure 8 | Life expectancy at age 65 by subnational region, men, 2018 (2014-2016 for all Canadian provinces/territories)