September 28th 2023
LIFE TABLES – NUTS 2
LIFE EXPECTANCIES – NUTS 3
2020-2022

NORTE WITH THE HIGHEST LIFE EXPECTANCY AT BIRTH AND AT AGE 65

Life expectancy at birth in Portugal, in 2020-2022, was estimated at 80.96 years, 78.05 years for men and 83.52 years for women, corresponding, vis-à-vis 2019-2021, to an increase of 0.01 years for men and a decrease of 0.01 years for women.

By NUTS 2 regions, in the triennium 2020-2022, the highest estimated life expectancy at birth was in the Norte region, for the total population (81.53 years), and both for men (78.74 years) and for women (84.02 years).

By NUTS 3 regions, the highest life expectancy at birth was registered in Cávado, the only region where it exceeded 82 years (82.26 years).

Life expectancy at age 65 in Portugal, in 2020-2022, was estimated at 19.61 years. At the age of 65, men could expect to live 17.76 years and women 20.98 years, corresponding to a slight decrease for men (-0.01 years), and no change in life expectancy at 65 for women, compared to 2019-2021.

By NUTS 2, in the triennium 2020-2022, the highest life expectancy at age 65 was registered in the Norte region, for the total population (19.88 years) and for men (18.17 years), and in the Centro region for women (21.24 years).

By NUTS 3, Cávado and Viseu Dão Lafões were the regions registering the highest values for life expectancy at 65, 20.64 and 20.14 years respectively.

Following the release, in May 2023, of the 2020-2022 Complete Life Table for Portugal, Statistics Portugal releases, on the website – www.ine.pt – the Complete Life Tables 2020-2022 for regions NUTS 2, for the total population and by sex, and life expectancy at birth and at age 65 for NUTS 3 regions for the total population.

Regional life tables and indicators for the 2020-2022 triennium, published in this press release, include, for the first time, resident population estimates based on the 2021 Census, and are therefore not entirely comparable with the results of the regional life tables and indicators from previous triennia. Figures for Portugal as a whole are comparable, since the revised series of life tables for Portugal, for the period 2010-2012 to 2019-2021, was released on May 31, 2023, jointly with the Complete Life Tables for Portugal 2020-2022, for the total population and by sex.

The indicators published and analyzed in this Press Release are available on the Official Statistics Portal and the respective links can be found in the Excel file published together with this Press Release.

Life expectancy at birth and at 65 in Portugal

In the 2020-2022 triennium, life expectancy at birth, for Portugal, was estimated at 80.96 years, which corresponded to a reduction of 0.01 years (0.12 months) compared to the previous triennium (80.97 years), yet as a consequence of the increase in the number of deaths in the context of the COVID-19 disease pandemic.

At birth, men could expect to live 78.05 years and women 83.52 years, which represented an increase of 0.01 years and a decrease of 0.01 years, respectively, compared to the values estimated for 2019-2021.

Life expectancy at age 65 was estimated at 19.61 years, in the 2020-2022 triennium, which corresponded to a decrease of 0.01 years (0.12 months) compared to the previous triennium. Men aged 65 could expect to live an average of 17.76 years longer and women 20.98 years longer, a reduction of 0.01 years (0.12 months) for men, and unchanged for women compared to the previous triennium. The gap between male and female longevity at age 65, in 2020-2022, was 3.22 years.

Figure 1: Life expectancy at birth and at age 65, Portugal, 2010-2012 to 2020-2022

	Life expectancy at birth (years)			Life expectancy at age 65 (years)		
	Total	Males	Females	Total	Males	Females
2010 - 2012	79.78	76.67	82.60	18.84	16.95	20.27
2011 - 2013	80.03	76.97	82.80	19.00	17.15	20.41
2012 - 2014	80.32	77.24	83.12	19.20	17.34	20.64
2013 - 2015	80.47	77.43	83.23	19.25	17.42	20.67
2014 - 2016	80.69	77.67	83.38	19.37	17.50	20.78
2015 - 2017	80.85	77.86	83.50	19.53	17.67	20.91
2016 - 2018	80.89	77.92	83.51	19.59	17.72	20.96
2017 - 2019	81.05	78.13	83.61	19.73	17.87	21.11
2018 - 2020	81.22	78.34	83.74	19.86	18.04	21.19
2019 - 2021	80.97	78.04	83.53	19.62	17.77	20.98
2020 - 2022	80.96	78.05	83.52	19.61	17.76	20.98

Source: Statistics Portugal, Life tables.

ine.pt | Communication Unit - tel: + 351 21 842 61 10 | sci@ine.pt

Life expectancy at birth in regions NUTS 2

The Norte region registered the highest values of life expectancy at birth

In the 2020-2022 triennium, the Norte region registered the highest life expectancy at birth for the total population (81.53 years), and both for men (78.74 years) and for women (84.02 years). In contrast, the Autonomous Regions of Madeira and Açores had the lowest values, both for the total population (78.77 and 78.04 years respectively) and for men and women.

The greatest differences in longevity between men and women, in 2020-2022, were recorded in the Autonomous Regions of Açores and Madeira, where women could expect to live, on average, 6.94 and 6.58 years longer than men, respectively. The Norte and Centro regions showed the lowest differences in longevity between the two sexes (5.28 and 5.42 years, respectively).

Life expectancy at age 65 in regions NUTS 2

The Norte region registered the highest value for life expectancy at 65 for men and the Centro region registered the highest value for women

In the 2020-2022 triennium, the highest values for life expectancy at 65 for the total population (19.88 years) and for men (18.17 years) were observed in the Norte region. For women, the highest value was observed in the Centro region (21.24 years).

The greatest differences in longevity at 65 between men and women in 2020-2022 were in the Autonomous Regions of Madeira and Açores, where women could expect to live on average 4.33 and 4.30 years longer than men, respectively. The Centro region registered the lowest difference between the two sexes (3.02 years).

Figure 2: Life expectancy at birth, NUTS 2, 2010-2012 to 2020-2022

	Norte	Centro	A.M. Lisboa	Alentejo	Algarve	R.A. Açores	R.A. Madeira
	Life expectancy at birth (years) - Total						
2010 - 2012	80.14	80.09	79.65	79.26	79.67	76.32	77.03
2011 - 2013	80.32	80.24	80.00	79.45	80.02	76.49	77.49
2012 - 2014	80.55	80.55	80.32	79.81	80.22	76.82	77.68
2013 - 2015	80.69	80.80	80.50	80.03	80.38	77.15	77.76
2014 - 2016	80.99	80.98	80.71	80.04	80.34	77.28	78.02
2015 - 2017	81.13	81.07	80.85	80.19	80.17	77.48	78.18
2016 - 2018	81.18	81.11	80.94	80.24	79.93	77.85	78.30
2017 - 2019	81.33	81.23	81.01	80.35	79.99	77.87	78.36
2018 - 2020	81.46	81.36	81.14	80.42	80.14	78.00	78.52
2019 - 2021	81.13	80.98	80.75	79.83	79.78	78.18	78.55
2020 - 2022	81.53 ⊥	81.34 ⊥	80.65 ⊥	80.09 ⊥	79.99 ⊥	78.04 ⊥	78.77 ⊥
	Life expectance at birth (years) - Males						
2010 - 2012	77.05	77.05	76.53	76.40	76.36	72.80	73.19
2011 - 2013	77.36	77.12	76.85	76.29	76.74	72.80	73.41
2012 - 2014	77.52	77.42	77.14	76.91	77.17	73.05	73.62
2013 - 2015	77.70	77.71	77.43	77.05	77.19	73.38	73.65
2014 - 2016	78.07	78.05	77.65	77.07	76.99	73.72	73.96
2015 - 2017	78.21	78.15	77.95	77.27	76.72	73.89	74.25
2016 - 2018	78.25	78.16	77.99	77.31	76.46	74.26	74.34
2017 - 2019	78.44	78.27	78.11	77.37	76.49	74.27	74.39
2018 - 2020	78.55	78.39	78.26	77.38	76.66	74.51	74.63
2019 - 2021	78.15	77.98	77.78	76.66	76.34	74.43	74.80
2020 - 2022	78.74 ⊥	78.47 ⊥	77.72 ⊥	77.04 ⊥	76.56 ⊥	74.43 ⊥	75.05 ⊥
	Life expectancy at birth (years) - Females						
2010 - 2012	82.90	82.94	82.54	82.02	82.90	79.88	80.27
2011 - 2013	83.01	83.07	82.77	82.24	83.01	79.99	80.91
2012 - 2014	83.24	83.37	83.10	82.57	83.03	80.27	81.12
2013 - 2015	83.42	83.54	83.19	82.70	83.31	80.65	81.19
2014 - 2016	83.64	83.66	83.30	82.72	83.48	80.75	81.41
2015 - 2017	83.74	83.74	83.42	82.83	83.37	81.00	81.43
2016 - 2018	83.77	83.74	83.49	82.90	83.14	81.31	81.44
2017 - 2019	83.85	83.87	83.54	83.03	83.24	81.33	81.48
2018 - 2020	83.99	84.00	83.67	83.27	83.32	81.33	81.52
2019 - 2021	83.81	83.73	83.41	82.77	82.93	81.53	81.47
2020 - 2022	84.02 ⊥	83.89 ⊥	83.24 ⊥	82.96 ⊥	82.86 ⊥	81.37 ⊥	81.63 ⊥

Source: Statistics Portugal, Life tables.

Note: Break in series in the 2020-2022 triennium, as a result of the incorporation of resident population estimates based on the 2021 Census.

Figure 3: Life expectancy at age 65, NUTS 2, 2010-2012 to 2020-2022

	Norte	Centro	A.M. Lisboa	Alentejo	Algarve	R.A. Açores	R.A. Madeira
	Life expectancy at age 65 (years) - Total						
2010 - 2012	18.95	19.03	18.86	18.48	19.09	16.30	17.11
2011 - 2013	19.04	19.08	19.11	18.65	19.17	16.62	17.45
2012 - 2014	19.21	19.32	19.35	18.74	19.33	16.66	17.53
2013 - 2015	19.25	19.45	19.43	18.87	19.66	16.84	17.67
2014 - 2016	19.45	19.55	19.52	19.05	19.66	17.06	17.67
2015 - 2017	19.65	19.61	19.66	19.18	19.46	17.12	17.75
2016 - 2018	19.71	19.75	19.81	19.20	19.08	17.24	17.69
2017 - 2019	19.78	19.75	19.91	19.31	19.36	17.52	17.65
2018 - 2020	19.86	19.79	19.97	19.42	19.58	17.63	17.72
2019 - 2021	19.51	19.43	19.60	18.85	19.21	17.58	17.76
2020 - 2022	19.88 ⊥	19.85 ⊥	19.51 ⊥	19.17 ⊥	19.16 ⊥	17.65 ⊥	17.95 ⊥
	Life expectancy at age 65 (years) - Males						
2010 - 2012	17.08	17.08	16.97	16.69	17.03	14.19	14.97
2011 - 2013	17.24	17.16	17.16	16.77	17.31	14.37	15.07
2012 - 2014	17.38	17.33	17.36	16.84	17.34	14.44	15.08
2013 - 2015	17.48	17.43	17.49	16.99	17.66	14.76	15.15
2014 - 2016	17.70	17.60	17.57	17.26	17.67	14.98	14.99
2015 - 2017	17.89	17.78	17.85	17.28	17.34	14.92	15.12
2016 - 2018	17.92	17.82	17.91	17.35	16.92	15.07	15.04
2017 - 2019	17.98	17.79	18.00	17.43	17.25	15.46	15.00
2018 - 2020	18.02	17.82	18.05	17.68	17.50	15.48	15.08
2019 - 2021	17.65	17.34	17.65	16.96	16.88	15.10	15.06
2020 - 2022	18.17 ⊥	18.05 ⊥	17.59 ⊥	17.36 ⊥	17.14 ⊥	15.10 ⊥	15.38 ⊥
	Life expectancy at age 65 (years) - Females						
2010 - 2012	20.42	20.58	20.34	19.98	20.82	18.06	18.51
2011 - 2013	20.46	20.56	20.63	20.14	20.75	18.23	18.89
2012 - 2014	20.55	20.81	20.81	20.20	20.89	18.29	18.99
2013 - 2015	20.64	20.95	20.86	20.28	20.99	18.41	19.17
2014 - 2016	20.83	20.99	21.03	20.48	21.04	18.69	19.35
2015 - 2017	21.00	21.03	21.11	20.69	21.06	18.84	19.40
2016 - 2018	21.01	21.14	21.37	20.70	21.09	18.93	19.37
2017 - 2019	21.13	21.24	21.48	20.85	21.12	18.97	19.39
2018 - 2020	21.26	21.37	21.54	20.85	21.27	19.24	19.46
2019 - 2021	20.92	21.05	21.18	20.32	21.09	19.57	19.55
2020 - 2022	21.19 ⊥	21.24 ⊥	21.03 ⊥	20.56 ⊥	21.02 ⊥	19.40 ⊥	19.71 ⊥

Source: Statistics Portugal, Life tables.

Note: Break in series in the 2020-2022 triennium, as a result of the incorporation of resident population estimates based on the 2021 Census.

Life expectancy at birth in regions NUTS 3

Highest life expectancy at birth was recorded in the NUTS 3 region Cávado

In the 2020-2022 triennium, life expectancy at birth estimates showed that eight out of the 25 NUTS 3 regions (Cávado, Região de Leiria, Região de Coimbra, Região de Aveiro, Área Metropolitana do Porto, Viseu Dão Lafões and Alto Minho) exceeded the national figure (80.96 years), all recording life expectancies at birth above 81 years. The highest life expectancy was registered in NUTS 3 region Cávado, the only region to exceed 82 years (82.26 years).

By contrast, the lowest life expectancies at birth occurred in Região Autónoma dos Açores, Baixo Alentejo and Região Autónoma da Madeira, where life expectancy did not reach 79 years.

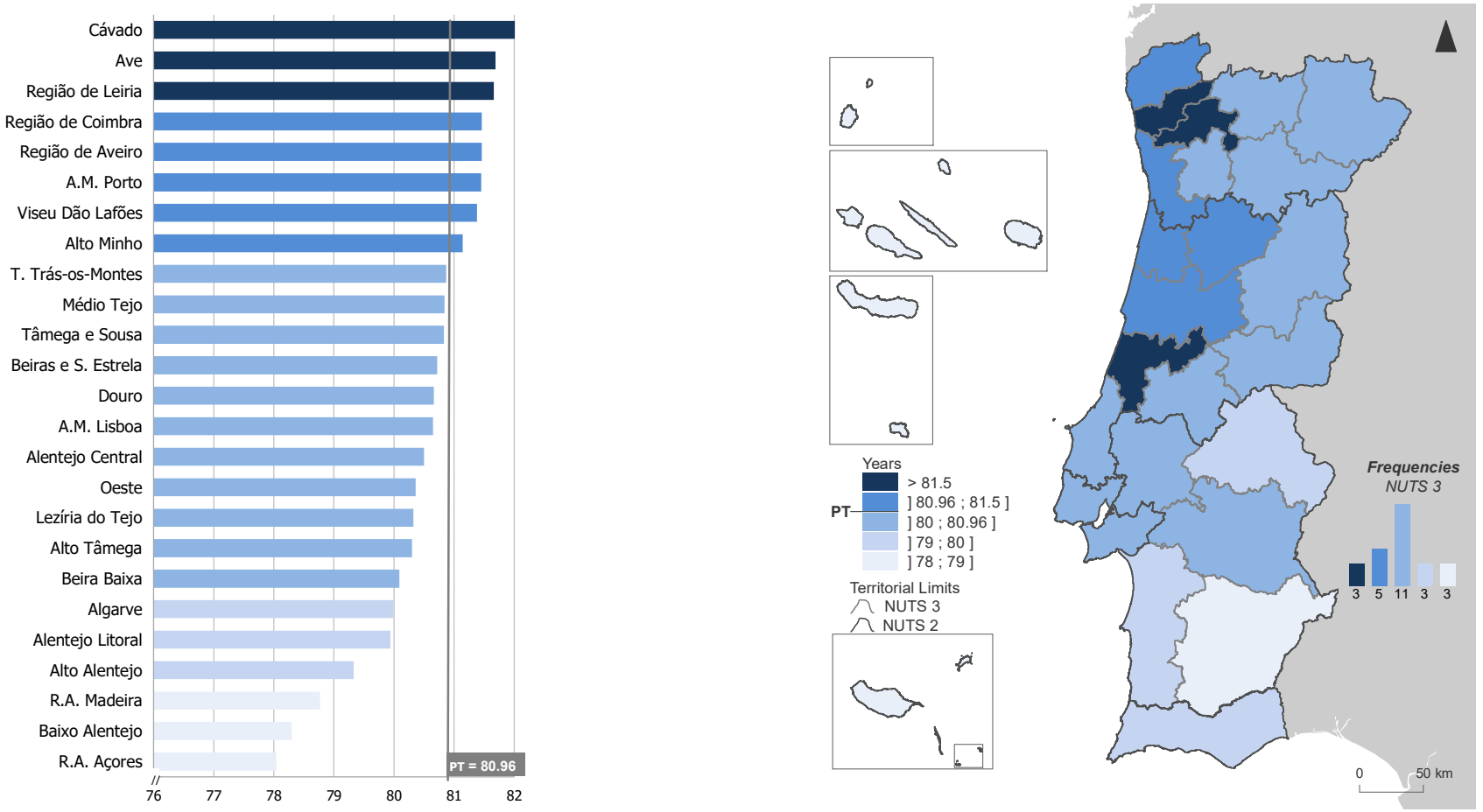
Life expectancy at age 65 in regions NUTS 3

The highest life expectancy at age 65 occurred in Cávado and Viseu Dão Lafões regions

In the 2020-2022 triennium, life expectancy at 65 exceeded the national figure (19.61 years) in fourteen NUTS 3 regions. The Cávado and Viseu Dão Lafões regions recorded the highest values for life expectancy at 65, 20.64 and 20.14 years respectively.

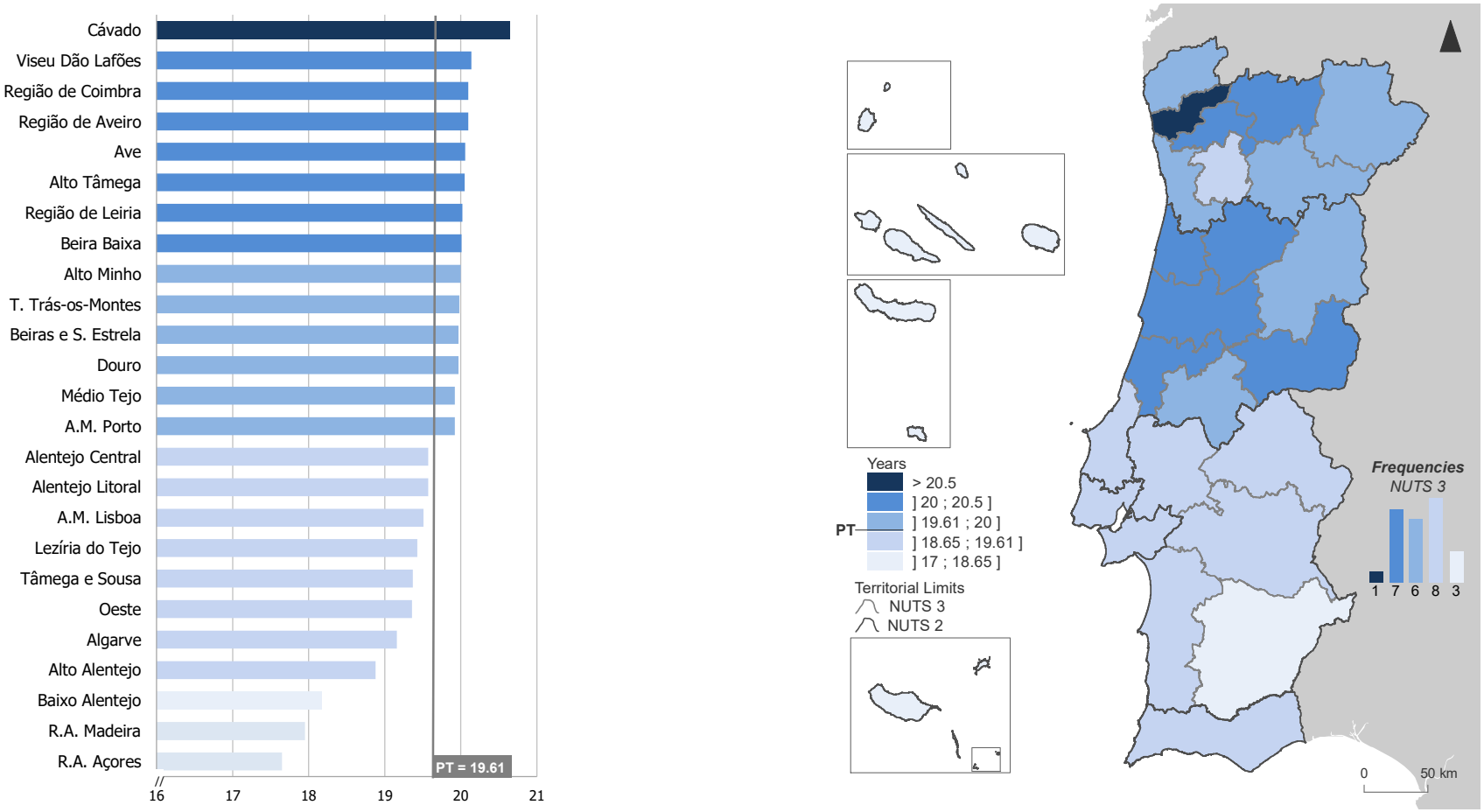
The lowest life expectancies at age 65, below eighteen years, were recorded in Região Autónoma dos Açores (17.65 years) and Região Autónoma da Madeira (17.95 years).

Figure 4: Life expectancy at birth, NUTS 3, 2020-2022



Source: Statistics Portugal, Life tables.

Figure 5: Life expectancy at age 65, NUTS 3, 2020-2022



Source: Statistics Portugal, Life tables.

Figure 6: Life expectancy at birth and at age 65, Portugal, NUTS 1, NUTS 2 and NUTS 3, 2020-2022

	Life expectancy at birth (years)	Life expectancy at age 65 (years)
	2020 - 2022	2020 - 2022
Portugal	**80.96**	**19.61**
Continente	**81.07**	**19.67**
Norte	**81.53**	**19.88**
Alto Minho	81.14	20.00
Cávado	82.26	20.64
Ave	81.69	20.06
Área Metropolitana do Porto	81.45	19.92
Alto Tâmega	80.30	20.05
Tâmega e Sousa	80.83	19.37
Douro	80.66	19.97
Terras de Trás-os-Montes	80.87	19.98
Centro	**81.34**	**19.85**
Oeste	80.36	19.36
Região de Aveiro	81.46	20.10
Região de Coimbra	81.46	20.10
Região de Leiria	81.66	20.02
Viseu Dão Lafões	81.38	20.14
Beira Baixa	80.09	20.01
Médio Tejo	80.84	19.92
Beiras e Serra da Estrela	80.72	19.97
Área Metropolitana de Lisboa	**80.65**	**19.51**
Área Metropolitana de Lisboa	80.65	19.51
Alentejo	**80.09**	**19.17**
Alentejo Litoral	79.94	19.57
Baixo Alentejo	78.30	18.17
Lezíria do Tejo	80.32	19.43
Alto Alentejo	79.33	18.88
Alentejo Central	80.50	19.57
Algarve	**79.99**	**19.16**
Algarve	79.99	19.16
Região Autónoma dos Açores	**78.04**	**17.65**
Região Autónoma dos Açores	**78.04**	**17.65**
Região Autónoma dos Açores	78.04	17.65
Região Autónoma da Madeira	**78.77**	**17.95**
Região Autónoma da Madeira	**78.77**	**17.95**
Região Autónoma da Madeira	78.77	17.95

Source: Statistics Portugal, Life tables.

TECHNICAL NOTE

The life table is the result of a mathematical model of demographic analysis composed by a set of basic functions which provide a basis for measuring longevity in a given population. Statistics Portugal calculates complete life tables, that is, by single years of age, for Portugal, NUTS 1, 2 and 3 regions with a reference period of three consecutive years. Regarding NUTS 3 regions from the mainland ('Continente'), only life expectancy at birth and at age 65 are released.

In the construction of complete life table for Portugal and NUTS 1 the probabilities of dying are estimated based on the observed number of deaths for a period of three consecutive years and on the respective estimates for the population exposed-to-the risk of death. The calculation of the population exposed to risk is based on information from estimates of resident population.

Due to the variability in the probabilities of dying at advanced ages (over 85 years) the method proposed by Denuit and Goderniaux (2005) is applied for smoothing and extrapolation to the last applicable age (closing age of the life table).

Given the rarity of mortality at some ages in small regions, the complete life tables for NUTS 2 regions are calculated by applying graduation and smoothing methods to mortality rates. For the 'Continente' NUTS 3 sub-regions the Brass relational model (1971, 1974) is applied for obtaining these rates. In both cases, the same method of closing and extrapolating old age mortality rates is applied.

Values for life expectancy and other life table functions correspond to estimates calculated from statistical data and models and should not be interpreted as deterministic indicators. However, assuming the empirical mortality conditions observed in the reference period for the life table remain constant, it is possible, in a given population, to make probabilistic judgments on the evolution of mortality.

The Complete Life Tables 2020-2022 for the NUTS 1 and 2 regions, for the total population and by sex, and life expectancy at birth and at age 65 for the NUTS 3 regions, for the total population, published in this press release include in their calculation, for the first time, the results of the revised intercensal resident population estimates based on the results of the 2021 Census - Definitive Resident Population Estimates 2020 - as well as the first year of the new series of postcensal estimates based on the results of the 2021 Census - Provisional Resident Population Estimates 2021 -, released in March 2023. For this reason, the regional results for this triennium are not comparable with the results of the regional life tables and indicators from previous triennia.

REFERENCES:

Brass, W. (1971). On the scale of mortality. In: Biological Aspects of Demography, London Taylor and Francis.

Brass, W. (1974). Mortality models and their uses in demography. Transactions of the Faculty of Actuaries, 33, 123-132.

Denuit, M. and Goderniaux, A. (2005). Closing and projecting life tables using log-linear models. Bulletin de l'Association Suisse des Actuaries, 1, 29-49.

DEFINITIONS

Life expectancy at birth: The mean number of years that a newborn child can expect to live if subjected throughout his life to the current mortality conditions (age specific probabilities of dying).

Life expectancy at age 65: The mean number of years still to be lived by a person who has reached the exact age 65, if subjected throughout the rest of his life to the current age specific probabilities of dying.

Detailed methodological information available at: **www.ine.pt**, option Products, Metadata system.

Detailed statistical information available at: **www.ine.pt**, option Products, Statistical data, database, theme Population, subtheme Mortality and life expectancy.

Next press release

September 2024: "Life Tables NUTS 2 and Life Expectancies NUTS 3, 2021-2023".

---

ine.pt | Communication Unit - tel: + 351 21 842 61 10 | sci@ine.pt