

IV. Analysis by cause of death

1. Mortality probability by cause of death

Mortality probability by cause of death means the probability that a person of a given age will die from a specific cause of death in the future according to the life tables.

As for leading causes of death in 2021, the mortality probability by malignant neoplasms was the highest for both males and females at age 0, followed by heart diseases (excluding hypertensive heart diseases), cerebrovascular diseases and pneumonia. Comparing data between age 0 and 65, the mortality probability for malignant neoplasms was lower at age 65 than at age 0. And for heart diseases (excluding hypertensive heart diseases) and pneumonia it was higher at age 65. This trend was more likely observed at age 75 and 90.

The total of the mortality probabilities by malignant neoplasms, heart diseases (excluding hypertensive heart diseases) and cerebrovascular diseases was under 50 percent at all the ages for both males and females, comparing the data in 2020, it decreased at all the ages of 0, 65, 75 and 90 years for both males and females.

Table 6. Mortality probability by causes of death, 2021

(%)

Cause of death	Age 0		Age 65		Age 75		Age 90	
	Male	Female	Male	Female	Male	Female	Male	Female
Malignant neoplasms	27.66	19.86	27.55	18.28	24.76	16.12	15.43	9.68
Heart diseases (excluding hypertensive heart diseases)	14.38	16.20	14.43	16.75	14.71	17.22	16.63	18.19
Cerebrovascular diseases	6.86	7.46	6.84	7.55	6.87	7.64	6.12	7.31
Pneumonia	6.25	4.56	6.81	4.78	7.48	4.98	9.12	5.32
Accidents	2.98	2.24	2.79	2.20	2.81	2.18	2.71	1.89
Traffic accidents (regrouped)	0.31	0.13	0.17	0.11	0.14	0.09	0.06	0.02
Suicide	1.71	0.88	0.51	0.28	0.36	0.18	0.16	0.06
Chronic obstructive pulmonary disease	1.89	0.37	2.07	0.38	2.21	0.38	2.08	0.31
Renal failure	2.16	1.93	2.31	2.01	2.46	2.05	2.82	1.99
Aortic aneurysm and dissection	1.24	1.27	1.20	1.29	1.13	1.24	0.91	0.91
Diseases of liver	1.39	0.77	0.97	0.67	0.71	0.58	0.32	0.30
Diabetes mellitus	1.01	0.86	0.96	0.87	0.89	0.85	0.64	0.67
Hypertensive diseases	0.60	0.91	0.60	0.95	0.60	0.99	0.72	1.13
Tuberculosis	0.16	0.11	0.17	0.12	0.19	0.12	0.25	0.12
COVID-19	1.27	0.95	1.21	0.96	1.18	0.95	1.01	0.77
Senility	7.41	18.80	8.25	19.88	9.63	21.23	17.61	29.34
Malignant neoplasms, heart diseases (excluding hypertensive heart diseases) and cerebrovascular diseases (regrouped)	48.90	43.52	48.82	42.59	46.34	40.98	38.19	35.18

2. Potential years of life lost

If one cause of death is eliminated, then a person who died from that cause will die from another after the age at death by that cause. As a result, life expectancy increases. This extension of life, called the potential number of years lost, can be regarded as the lost life due to the cause of death and it is possible to estimate how much the cause affects life expectancy.

Looking at the increase in life expectancy when the specific cause of death in 2021 is eliminated, the main cause of death is that both male and female at age 0, 65, and 75 are malignant neoplasms, heart diseases (excluding hypertensive heart diseases), cerebrovascular diseases and pneumonia are in that order. At age 90 of age, heart diseases (excluding hypertensive heart diseases) is the largest in both male and female, then malignant neoplasms, in male pneumonia and cerebrovascular diseases in female, cerebrovascular diseases and pneumonia are in that order. Compared to the previous year, the life expectancy of all causes of death from malignant neoplasms, heart diseases (excluding hypertensive heart diseases), cerebrovascular diseases and pneumonia for both male and female was shorter when the specific cause of death was removed at all ages of 0, 65, 75 and 90 years.

Potential years of life lost by malignant neoplasms, heart diseases (excluding hypertensive heart diseases) and cerebrovascular diseases was 6.49 years for males and 5.28 years for females at age 0, 5.32 years for males and 4.24 years for females at age 65, 4.01 years for males and 3.44 years for females at age 75, 1.70 years for males and 1.75 years for females at age 90.

Table 7. Potential years of life lost, 2021

Cause of death	(years)							
	Age 0		Age 65		Age 75		Age 90	
	Male	Female	Male	Female	Male	Female	Male	Female
Malignant neoplasms	3.43	2.81	2.83	1.97	1.95	1.37	0.57	0.42
Heart diseases (excluding hypertensive heart diseases)	1.42	1.23	1.10	1.16	0.92	1.09	0.60	0.77
Cerebrovascular diseases	0.69	0.62	0.53	0.54	0.44	0.48	0.21	0.29
Pneumonia	0.43	0.29	0.43	0.29	0.42	0.29	0.31	0.20
Accidents	0.37	0.23	0.21	0.17	0.17	0.14	0.09	0.07
Traffic accidents (regrouped)	0.08	0.03	0.02	0.01	0.01	0.01	0.00	0.00
Suicide	0.58	0.34	0.06	0.04	0.03	0.02	0.01	0.00
Chronic obstructive pulmonary disease	0.14	0.03	0.14	0.03	0.13	0.03	0.07	0.01
Renal failure	0.16	0.14	0.15	0.13	0.14	0.12	0.09	0.08
Aortic aneurysm and dissection	0.14	0.12	0.10	0.11	0.07	0.09	0.03	0.04
Diseases of liver	0.24	0.12	0.10	0.07	0.05	0.05	0.01	0.01
Diabetes mellitus	0.11	0.08	0.08	0.07	0.06	0.06	0.02	0.03
Hypertensive diseases	0.05	0.05	0.04	0.05	0.03	0.05	0.02	0.04
Tuberculosis	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
COVID-19	0.14	0.09	0.10	0.07	0.07	0.06	0.03	0.03
Malignant neoplasms, heart diseases (excluding hypertensive heart diseases) and cerebrovascular diseases	6.49	5.28	5.32	4.24	4.01	3.44	1.70	1.75