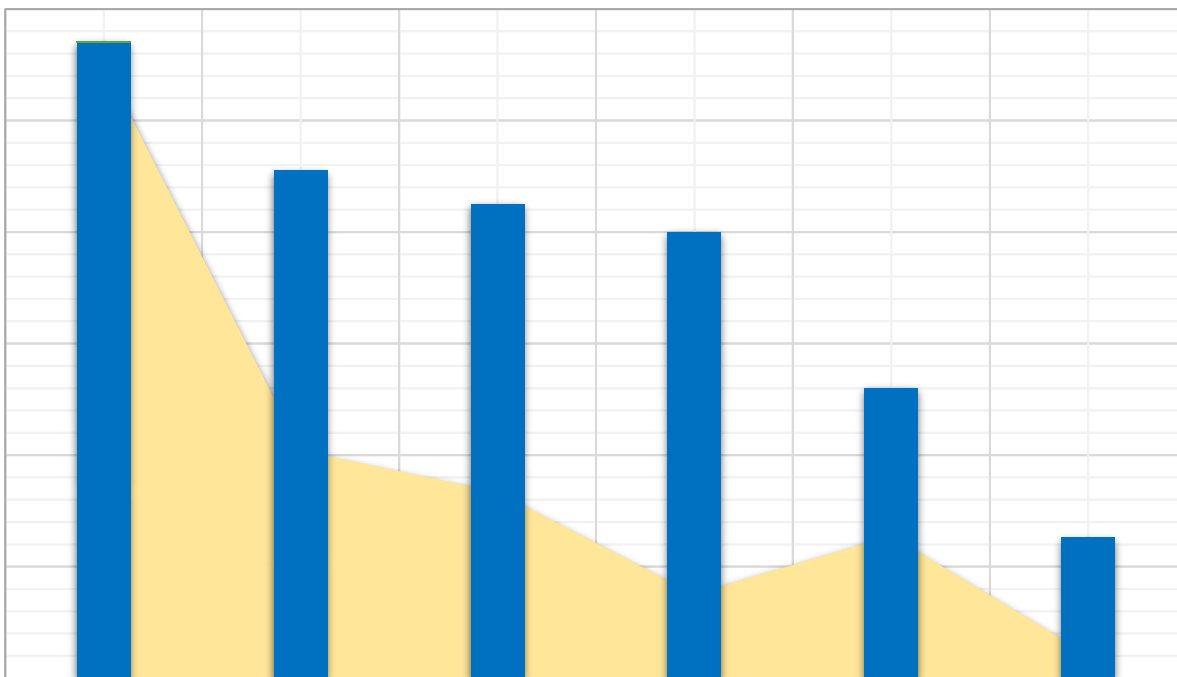




MINISTRY OF HEALTH

VITAL STATISTICS QUARTERLY REPORT



SECOND QUARTER

2022



VITAL STATISTICS QUARTERLY REPORT

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ABBREVIATIONS/ACRONYMS

COVID-19	Coronavirus disease 2019
CRD	Chronic Respiratory Diseases
CVD	Cardio-Vascular Diseases
ICD	International Classification of Diseases
MOH	Ministry of Health
NBS	National Bureau of Statistics
NCD	Non-Communicable Disease
PHEOC	Public Health Emergency Command Centre
WHO	World Health Organization

SUMMARY OF VITAL STATISTICS IN Q1- Q2, 2022

Vital Events	Q1-Q2 ,2022
Seychelles Population	99,258 (51% Male, 49% Female)
Registered Live births	780 (53% Males, 47% Females)
Registered Deaths	497 (58% Males, 42% Females)
Mortality from Diseases of the Circulatory system <i>(ICD-11: 1-BA0 to 1-BE1)</i>	146 (29% of total registered deaths)
COVID-19 related mortality⁽¹⁾ <i>(ICD-11: RA01)</i>	75 (15% of total registered deaths)
Mortality from Neoplasms <i>(ICD-11: 1-2A0 to 1-2F9)</i>	71 (14% of total registered deaths)
Mortality from Diseases of the Respiratory system <i>(ICD-11: 1-CA0 to 1-CB6)</i>	54 (11% of total registered deaths)
External causes of mortality <i>(ICD-11: 1-PA0 to 2-PL0)</i>	35 (7% of total registered deaths)
Mortality from Infectious and parasitic diseases <i>(ICD-11: 1-1A0 to 1-1G8)</i>	13 (3% of total registered deaths)
Other causes of mortality	103 (21% of total registered deaths)

Notes:

(1) Deaths that had COVID-19 as part of the series of events leading to death.

1.0 INTRODUCTION

This report summarizes vital events captured by Ministry of Health (MOH) for Q1-Q2 2022. The Vital Statistics of a population can be defined as information about that population's "vital events" such as births, deaths, marriages and divorces; expressed mainly in quantitative terms.

The scope of this report is limited to births and deaths. Statistics presented are mostly descriptive and displayed using tables and charts where applicable. International Classification of Diseases 11th revision (ICD-11) was used to code and group causes of death.

The official and legal source for Vital Statistics data in Seychelles is the National Civil Registration Office. However, comparisons and cross-checks were also carried out with records from Seychelles Hospital (wards, maternity and mortuary), hospitals in Praslin and La Digue, as well as Primary Healthcare Centres. The report also draws references from publications of the National Bureau of Statistics (NBS).

2.0 SEYCHELLES POPULATION

The Mid-Year estimated population of Seychelles in 2021 was 99,258; indicating a growth rate of 0.8% over population estimates in 2020.¹ It is important to note that although NBS recently released the estimated 2021 End-year population figures, demographic disaggregation of those figures were not made available, so we will continue to use the 2021 mid-year estimates for most of our denominators until the 2022 population report is released by NBS.

In 2021, 51% of the population were males, while 49% were females with an approximate ratio of 1032 males for every 1000 females. Of the total estimated population, 22% are aged below 15 years while 12% are aged 65 years and above (Annex 1: mid-year population estimates by broad age-groups and sex, 2017-2021).

¹ National Bureau of Statistics. (2021). Statistical Bulletin: *Population and Vital Statistics, Mid- Year Population Estimates*. Catalogue Number: Population 2021/2. Seychelles. Retrieved from: <https://www.nbs.gov.sc/downloads/mid-2021-population-estimates/download>

3.0 BIRTHS

3.1 Registered Births

There were 448 registered live births in Q2 alone; bringing the total number of registered births from January - June 2022 to 780 (53% Males, 47% Females), see Table 1.

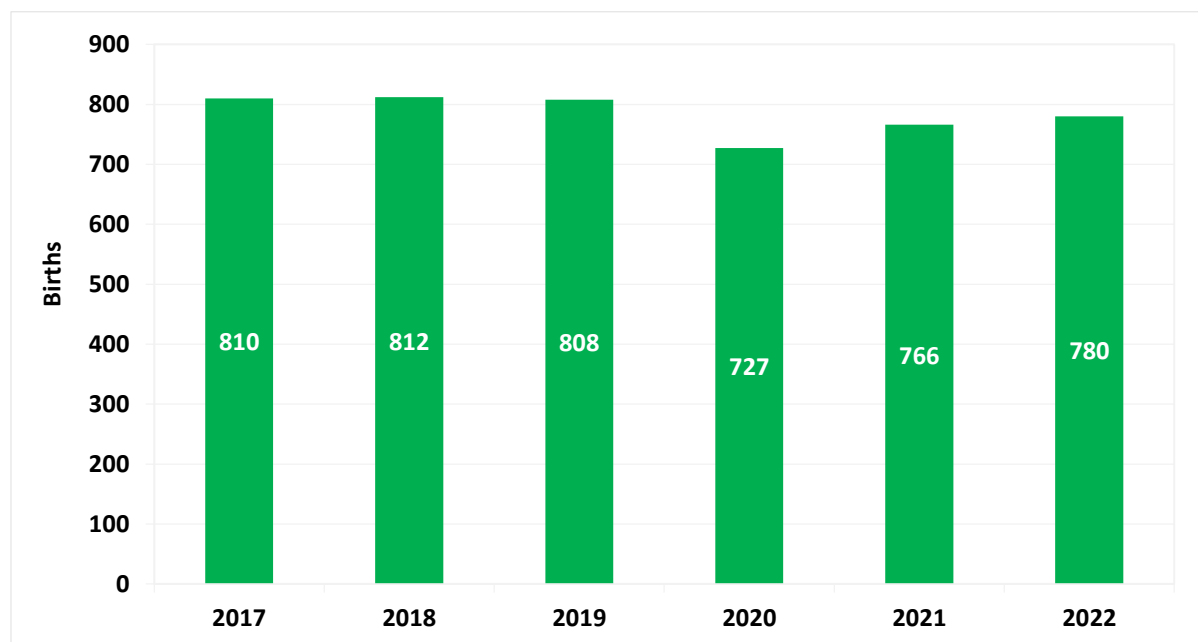
Table 1 Registered Live Births, January – June 2022

Month	Sex		Total
	Male	Female	
January	37	48	85
February	57	57	114
March	76	57	133
April	77	53	130
May	84	92	176
June	79	63	142
Total	410	370	780

Data Source: Department of Civil Status

Figure 1 shows registered live births in Seychelles in Q1- Q2 for six years (2017-2022).

Figure 1 Registered Live Births in Q1-Q2, 2017-2022



Data Source: Department of Civil Status/ NBS

3.2 Births in Hospital

Seychelles Hospital and other government-owned hospitals (Anse Royale, Praslin and La Digue) recorded a total of 796 births (791 live births and 5 stillbirths) in Q1- Q2 2022. Table 2 shows births in Hospital for 2021 and 2022.

The difference in the number of hospital births and registered births, is a consequence of the current law that allows up till 30 days after delivery to register births at the Civil Status Office. Therefore, some births in a particular month may be registered in the next month.

Table 2 Hospital Maternity Statistics (Mahe, Praslin & La Digue) in Q1- Q2, 2021-2022

Vital Events	2021	2022
Total births (live and still births)	864	796
Total live births	855	791
<i>Live births > 37 weeks</i>	798	751
<i>Live births < 37 weeks</i>	57	40
Total stillbirths	9	5
<i>Stillbirths > 37 weeks</i>	3	0
<i>Stillbirths < 37 weeks</i>	6	5
Birth Before Arrival	8	6
Low birth weight (< 2.5kg)	76	62

Data Source: Maternity Ward Statistics (2018-2021)/ MOH 2021 Hospital Services Annual Report

Note: The discrepancy with the number of registered births is due to the fact that legally, parents have 30 days to register births after delivery.

4.0 DEATHS

4.1 Registered Deaths

There were 497 registered deaths (58% Males, 42% Females) in Q1- Q2 2022 (Table 3).

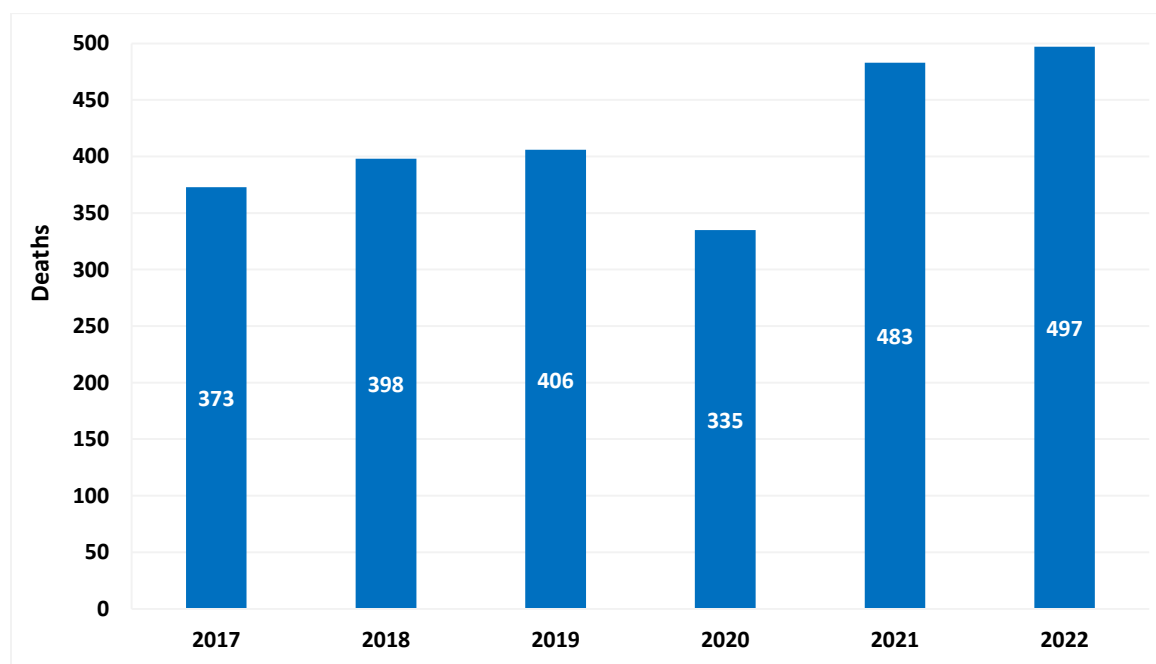
Table 3 Registered Deaths by Sex, January – June 2022

Month	Sex		Total
	Male	Female	
January	48	59	107
February	48	32	80
March	51	23	74
April	40	36	76
May	51	29	80
June	48	32	80
Total	286	211	497

Data Source: Department of Civil Status/ NBS

The deaths recorded at the end of Q2 2022 were higher than the number of deaths recorded in the same period of the previous five years (Figure 2).

Figure 2 Registered Deaths in Q1- Q2, 2017-2022



Data Source: Department of Civil Status/ NBS

Infant deaths accounted for 3% of total deaths in Q1- Q2 2022, while 59% of total deaths were persons in the age-group 65 years and above. In the reproductive and productive age-groups (25-64 years), there were more deaths among men (Table 4).

Table 4 Registered Deaths by Age-Group and Sex, Q1-Q2, 2022

Age-group (Years)	Sex		Total
	Male	Female	
<1	9	4	13
1-4	3	0	3
5-14	2	0	2
15-24	5	1	6
25-44	41	18	59
45-64	84	36	120
65& +	142	152	294
Total	286	211	497

Data Source: Department of Civil Status/ NBS

Among the 497 people who died, 24 (21 Males, 3 Females) were Non-Seychellois, representing 5% of total deaths (Table 5).

Table 5 Registered Deaths by Nationality and Sex, Q1 – Q2, 2022

Nationality	Non-Seychellois	Seychellois	Total
Male	21	265	286
Female	3	208	211
Total	24	473	497

Data Source: Department of Civil Status

It is also important to add that of the 473 Seychellois deaths reported at the end of Q2, Six (4 Males, 2 Females) died abroad but were registered in-country.

Table 6 shows registered deaths by months and the percentage distribution based on location (place) of death.

Table 6 Registered Deaths by Location (Place) of Death, Q1 - Q2, 2022

	Total Deaths	% Deaths in Hospital	% Deaths in COVID-19 Isolation Facility	% Deaths in Community
Jan-June 2022	497	51%	9%	40%
January	107	50%	20%	30%
February	80	49%	15%	36%
March	74	44%	4%	52%
April	76	51%	3%	46%
May	80	56%	5%	38%
June	80	54%	1%	45%

Data Source: Department of Civil Status/ MOH Hospital Statistics

5.0 CAUSES OF DEATHS

The main causes of mortality in Seychelles have been the same for many years (prior to the COVID-19 pandemic). In 2022, diseases of the circulatory system remain the leading cause of death, accounting for 146 deaths at the end of Q2. Other causes of death include COVID-19 related deaths, neoplasms, diseases of the respiratory system, infectious/parasitic diseases and external causes of mortality like drowning, falls and traffic accidents (Table 7).

Table 7 Comparison of Causes of Death in Q1-Q2, 2019-2022

ICD-11 Block Codes	Leading Causes of death	January - June			
		2019	2020	2021	2022
	Total Deaths	408	337	482	497
1-BA0 to 1-BE1	Diseases of the Circulatory system	125	124	139	146
RA01	COVID-19 related deaths ⁽¹⁾	-	-	71	75
1-2A0 to 1-2F9	Neoplasms	73	59	69	71
1-CA0 to 1-CB6	Diseases of the Respiratory system	75	58	50	54
1-PA0 to 2-PL0	External causes of mortality	29	22	13	35
1-1A0 to 1-1G8	Infectious and parasitic diseases	22	17	13	13
	Others causes of death	84	57	127	103

Notes:

(1) Include deaths that had COVID-19 as part of the series of events leading to death

COVID-19 Deaths

COVID-19 related deaths are deaths registered (by Civil Status) that had COVID-19 as part of the series of events leading to death. In many of these cases, the attribution was based on positive PCR tests on cadavers without clinical correlation – the positive COVID-19 test precluded a formal post-mortem examination. There were 75 (41 Males, 34 Females) registered COVID-19 related deaths in Q1- Q2 2022 (Table 8).

Table 8 Registered COVID-19 related deaths, Q1-Q2, 2022

Age-group (Years)	Sex		Total
	Male	Female	
25-44	4	3	7
45-64	10	3	13
65& +	27	28	55
Total	41	34	75

Data source: Department of Civil status

Furthermore, PHEOC reported 167 COVID-19 deaths in Q1- Q2 2022. PHEOC reported COVID-19 deaths are deaths where there is both (1) laboratory confirmation and (2) clinical syndrome leading to death are consistent with COVID-19 illness and/or its known complications.

Pneumonia Deaths

Pneumonia (not related to COVID-19) accounted for 8% of all registered deaths in Q1-Q2 2022. There were 39 deaths (22 Males, 17 Females) with pneumonia as the main cause; an increase compared to 28 deaths recorded in the same period in 2021.

The age-group 65 years and above, accounted for most pneumonia deaths in Q1-Q2 2022 (28 out of 39 deaths). There is no information on types of pneumonia nor their causative agents.

6.0 EXCESS DEATHS

Excess mortality can be explained as an unusual increase in the number of deaths *from all causes* (mostly during a crisis) above and beyond what we would have expected to see under 'normal' conditions. It attempts to describe how the number of deaths during the COVID-19 pandemic compares to the deaths that would have been expected had the pandemic not occurred.

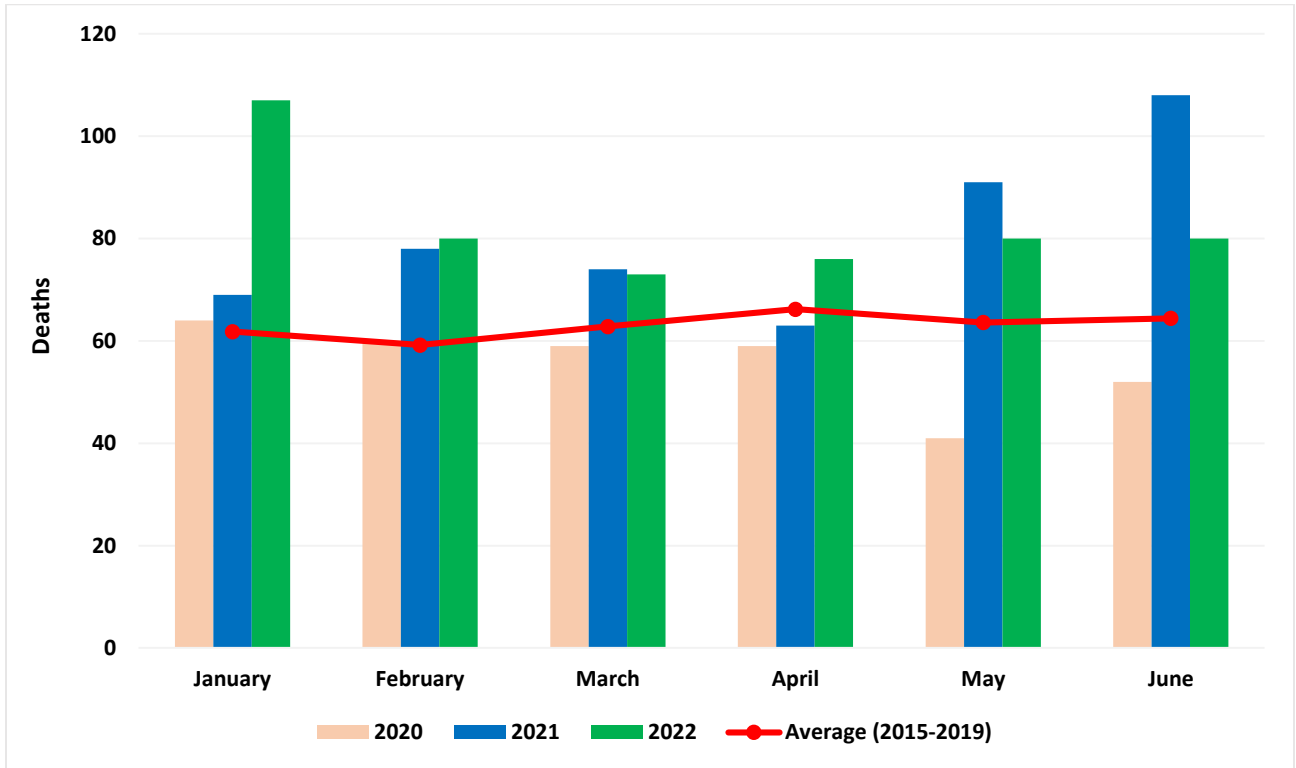
Table 9 and Figure 3 show deaths before the pandemic (2015-2019) and comparison of historical average to deaths in the same period of 2020, 2021 and 2022. We see excess deaths in 2022 compared to previous years.

Table 9 Registered Deaths from January to June, 2015-2022

	2015	2016	2017	2018	2019	Average (2015-2019)	2020	2021	2022
Jan-March (2015-2022)	358	355	373	398	406	378	335	482	497
January	52	52	61	64	80	62	64	69	107
February	50	56	65	58	67	59	60	78	80
March	69	68	53	57	67	63	59	73	74
April	63	72	52	77	67	66	59	63	76
May	46	54	81	70	67	64	41	92	80
June	78	53	61	72	58	64	52	107	80

Data Source: Department of Civil Status/ NBS

Figure 3 Registered Deaths (2020 - 2022) compared to Historical Average of Deaths (2015-2019)



Data Source: Department of Civil Status/ NBS

ANNEX

ANNEX 1. Mid-year Population Estimates By Broad Age-Group and Sex, 2017-2021

Sex / Age-group (Years)	2017	2018	2019	2020	2021
<u>MALES</u>	<u>48,793</u>	<u>49,259</u>	<u>49,665</u>	<u>50,061</u>	<u>50,413</u>
0-14	9,825	10,155	10,592	10,781	10,988
15-24	4,182	4,029	3,949	4,071	4,389
25-54	23,715	23,700	23,234	22,931	22,680
55-64	7,078	7,225	7,314	7,229	6,922
65+	3,993	4,150	4,576	5,049	5,434
<u>FEMALES</u>	<u>47,050</u>	<u>47,503</u>	<u>47,960</u>	<u>48,401</u>	<u>48,845</u>
0-14	9,411	9,724	9,936	10,158	10,497
15-24	3,524	3,627	3,703	3,986	4,215
25-54	21,710	21,181	20,708	20,276	19,763
55-64	7,158	7,444	7,773	7,841	7,887
65+	5,247	5,527	5,840	6,140	6,483
<u>BOTH SEXES</u>	<u>95,843</u>	<u>96,762</u>	<u>97,625</u>	<u>98,462</u>	<u>99,258</u>
0-14	19,236	19,879	20,528	20,939	21,485
15-24	7,706	7,656	7,652	8,057	8,604
25-54	45,425	44,881	43,942	43,207	42,443
55-64	14,236	14,669	15,087	15,070	14,809
65+	9,240	9,677	10,416	11,189	11,917
<u>BOTH SEXES</u>					
%					
0-14	20.1	20.5	21.0	21.3	21.6
15-24	8.0	7.9	7.8	8.2	8.7
25-54	47.4	46.4	45.0	43.9	42.8
55-64	14.9	15.2	15.5	15.3	14.9
65+	9.6	10.0	10.7	11.4	12.0

Source: NBS

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