ANALYSIS ON CAUSES OF DEATH BASED ON DIGITAL CIVIL REGISTRATION DATABASE 2021-2025



SUMMARY OF KEY FINDINGS

This factsheet presents selected key findings from the report **"Analysis on Causes of Death in Viet Nam based on Digital Civil Registration Database, 2021–2025".** The report draws on cause-of-death information recorded in electronic civil registration data, applying statistical principles and methods to code, classify and analyse the data. It describes the patterns, distribution and trends in causes of death in Viet Nam during 2021–2025, providing additional statistical evidence to improve public health care and policymaking.

The findings reflect cause-of-death patterns and trends recorded and coded from civil registration data. They are not intended to replace conclusions or assessments of causes of death or mortality trends conducted by health professionals.

I. MORTALITY DATA AND NUMBER OF REGISTERED DEATHS[1]

Death is defined as the irreversible cessation of all vital functions of an organism, including the cessation of the heartbeat and breathing, and the loss of consciousness.[2] During the 2021–2025 period, more than 2.8 million deaths were registered nationwide within 365 days of their occurrence.

Year 2021	Year 2022	Year 2023	Year 2024	Year 2025
547 148 cases	**607 380** cases	**536 441** cases	**548 761** cases	**566 624** cases



Diseases were the leading causes of death, accounting for **64.5%** of all deaths occurred during 2021-2025. Of these, 28.0% are conditions with a clearly identified cause, while **72.0%** are conditions where the cause cannot be determined (also referred to as deaths due to diseases with unknown causes).

Deaths caused by external factors (non-disease-related), such as road traffic accidents, occupational accidents, and other injuries, remained at a low level, accounting for **4.8%** of total deaths during 2021–2025.





Deaths attributed to age-related frailty accounted for **20.6%** of all registered deaths during the 2021–2025 period.

The proportion of deaths with an undetermined cause stood at **10.2%** for the 2021–2025 period, rising from **8.5%** in 2021 to **11.9%** in 2025.



1. *These are cases where a death has been registered within one year (i.e., 365 days) of the date of death, excluding instances where the age at death is less than 0 or greater than 122 years.*
2. *Decision No. 1996/QĐ-BYT dated June 18, 2025, of the Minister of Health, on the issuance of Guidelines for completing the Form for Diagnosis of Cause of Death at healthcare and medical treatment facilities*

II. DEATHS DUE TO DISEASES

1. DEATH DUE TO CANCER

Period 2021-2025

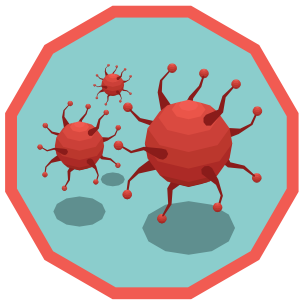
approximately 152,100 cancer deaths were recorded nationwide, accounting for around 8.4% of all deaths due to diseases

Rise in cancer deaths among young people (aged below 20 years)

Year 2021- **364** death cases
Year 2022 - **379** death cases
Year 2023 - **430** death cases
Year 2024 - **529** death cases
Year 2025 - **648** death cases

Rising trend in cancer-related deaths

In 2021, there were over 19.4 thousand deaths from cancer, accounting for approximately 5.0% of all deaths caused by disease; in 2025 it reached 46.8 thousand, accounting for 15.2%.



High risks among men

Men face a higher risk of dying from cancer than women. On average, for every three people who die from cancer, two are men.

Age groups at higher risk of death from cancer

Cancer-related deaths occur primarily among middle-aged and older adults; the proportion of deaths attributed to cancer rises rapidly starting at age 40, peaking in the 60–69 age group (accounting for 32.9%).

The 4 most common types of cancer

- **Lung cancer,**
- **Liver cancer**
- **Stomach cancer**
- **Colon cancer**

Accounting for 50.6% of total cancer deaths during the 2021–2025 period.

2. DEATHS ASSOCIATED WITH THE CIRCULATORY SYSTEM



During 2021-2025, approximately **179,800 deaths due to diseases** of the circulatory system were recorded, accounting for nearly 9.9% of all deaths due to diseases.



Stroke (cerebrovascular accident) was the leading cause of death in this category. During 2021–2025, approximately **109,400** stroke deaths were recorded, accounting for **60.8%** of all deaths relating to the circulatory system.

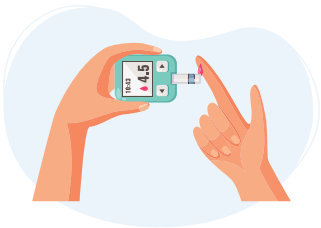
Men are 2.2 times more likely than women to die from stroke. During 2021–2025, a total of **109,395** stroke-related deaths were recorded, of which men accounted for **69.2%**, more than twice the proportion of women (30.8%).

3. DEATH DUE TO DIABETES MELLITUS



During 2021–2025, more than **13,800 deaths due to diabetes were recorded**, accounting for 0.8% of all deaths due to diseases, and averaging approximately **2,800 deaths** per year.

In 2025, the number of deaths due to diabetes reached its highest level at **3,723** cases, accounting for 27.0% of all diabetes deaths recorded during 2021–2025.



Approximately **97.0%** of diabetes deaths occurred among **people aged 40 and over.**



Women accounted for **54.3%** of diabetes deaths, **8.7 percentage** points higher than the proportion of men.

4. DEATH DUE TO KIDNEY FAILURE



During 2021–2025, approximately **11,300 deaths** due to kidney failure were recorded nationwide accounting for **0.6%** of all deaths due to diseases. Males accounted for about **56.5%** of these deaths.

Deaths due to kidney failure were concentrated among people aged **50–74 years**, who accounted for **60.1%** of all deaths from this condition.

Males died from kidney failure at considerably younger ages than females. In age groups below **70 years**, the number of male deaths from kidney failure was consistently higher than the number of female deaths. In particular, among people aged 25–44, the number of male deaths was 1.7 to 2.2 times higher than that of female deaths. After age 70, the number of female deaths began to exceed that of males.

5. DEATHS DUE TO DISEASES OF THE DIGESTIVE SYSTEM





During the 2021–2025 period, over **23,700 deaths** were attributed to digestive system diseases, accounting for **1.3%** of all deaths caused by diseases.



79.7% of deaths due to digestive system conditions are male; **94.3%** are aged 35 or older.



Between 2021 and 2025, **300 deaths among children under the age of 5** were recorded nationwide due to gastrointestinal conditions, highlighting the vulnerability of young children to digestive issues and intestinal infections.

6. COVID-19



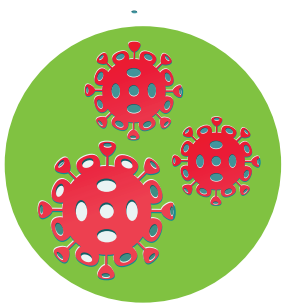
2021–2025

Approximately **38.6 thousand** deaths recorded due to Covid-19 accounting for **2.2%** of the total number of deaths caused by diseases.



2021–2022

Almost all COVID-19 deaths occurred in 2021 and 2022, accounting for **99.1%** of the total.



2021–2022

In 2021, **23.7** thousand deaths were recorded, equivalent to **6.1%** of the total number of deaths caused by diseases that year. In 2022, **14.5** thousand deaths were recorded, accounting for **3.5%** of the total number of deaths caused by diseases.



Deaths from Covid-19 were gradually decreasing

In 2023, the number of deaths due to COVID-19 **fell to 274**; in 2024, it dropped to 83, and in 2025, only 6 cases were recorded.



Approximately 85.9%

of Covid-19-related deaths occurred among individuals aged 50 and older; **58.1%** were female, and **41.9%** were male.

III. DEATHS DUE TO ACCIDENTS AND EXTERNAL FACTORS

1. DEATHS DUE TO TRAFFIC ACCIDENTS

PERIOD 2021-2025



Traffic accidents were **identified as the leading cause of deaths due** to external factors.



Traffic accidents caused **47,900 deaths**, accounting for **35.6%** of all fatalities due to external shocks.



an average of nearly **9,600 people** per year died of traffic accidents.



The majority of traffic accident fatalities are male **(78.2%)**, with men in the 20–24 age group accounting for the highest proportion **(12.8%).**

2. DEATHS DUE TO DROWNING

Over the five-year period from 2021 to 2025, drowning claimed the lives of **20,700 people,** accounting for **15.4%** of all deaths resulting from unexpected incidents.



On average, nearly **4,100** drowning deaths occurred each year.



Children aged 0–14 years were vulnerable to drowning. Nearly four out of every ten drowning deaths occurred among children in this age group.

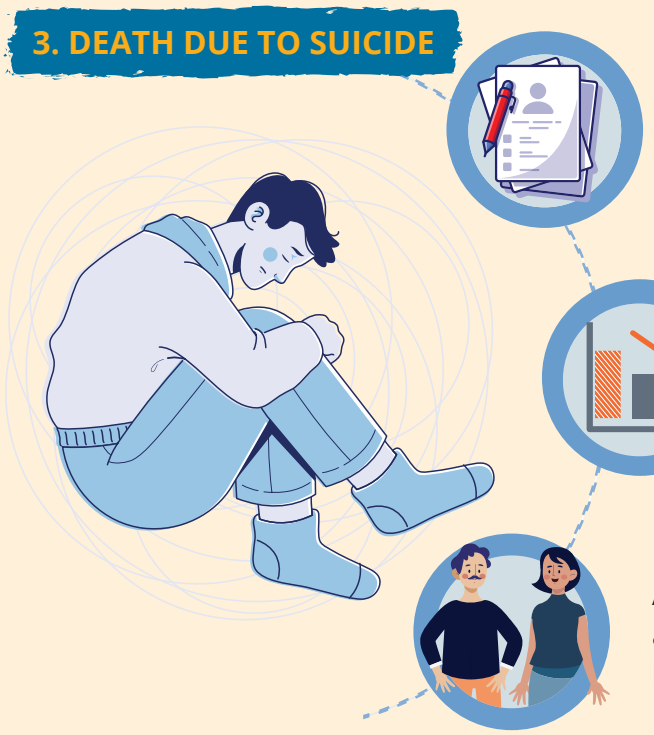


Nearly 70% of accident related deaths among children under 10 years of age are caused by drowning.



Males are at a higher risk of drowning than females. Three-quarters of all drowning cases involve males.

3. DEATH DUE TO SUICIDE



During the 2021–2025 period, approximately **13,800 people in Vietnam died by suicide**, accounting for 10.2% of all deaths caused by external shocks.

During the first three years of the period, the number of suicide deaths increased from **2,473** in 2021 to **3,028** in 2023. In the last two years, the number showed signs of a gradual decline.

Approximately **78.8%** of those who die by suicide are men; **76.0%** of the men who die by suicide are between the ages of 20 and 54.

IV. DEATHS DUE TO UNSPECIFIED DISEASES, AGE-RELATED FRAILTY AND UNKNOWN CAUSES[2]

1. DEATHS DUE TO UNSPECIFIED DISEASES

In the death registration database, a significant proportion of deaths attributed to illness remain without a specified, definitive cause. For the 2021–2025 period, such cases accounted for **72.0%** of all deaths resulting from illness. Although this figure has improved notably-dropping from **75.7%** in 2021 to **57.9%** in 2025-it remains high. This reflects the reality that a large number of deaths occur within the community, which hinders the ability to fully and accurately determine the cause of death and poses a challenge for the health sector's efforts to track and analyze causes of mortality.

2. DEATHS DUE TO AGE-RELATED FRAILTY[3]



- During 2021–2025, the death registration database recorded approximately **576,700** deaths due to old age.
- The proportion of deaths attributed to old age among all registered deaths increased from **15.7%** in 2021 to **29.6%** in 2025.
- Approximately **60.5%** of those who died due to old age were women.

2. *In the electronic civil registration database, in addition to deaths for which the cause can be determined relatively clearly according to medical standards based on information certified by health facilities, there are also a large number of deaths occurring in the community where no physician directly examined, diagnosed, or medically determined the cause of death. For these cases, information on the cause of death is often incomplete, lacks specificity, and is difficult to determine accurately. Such deaths are therefore coded into one of three groups: (i) death due to disease of unknown cause; (ii) death due to natural decline associated with old age; and (iii) death of undetermined cause.*
3. *Death due to natural age-related decline" is not an officially recognized cause of death. Rather, aging leads to a decline in bodily functions, making older people more susceptible to diseases and less able to withstand illnesses and complications. The death registration database contains only general descriptions such as "death from old age", "old-age illness", and "age-related frailty". In essence, deaths attributed to "natural age-related decline" are deaths due to illness with no specific cause identified among older people.*

3. DEATHS WITH AN UNDETERMINED CAUSE[4]



- During 2021–2025, the digital civil registration database recorded approximately **285,200** deaths with undetermined causes, accounting for **10.2%** of all registered deaths.
- This proportion showed an upward trend during 2021–2025, increasing from **8.5%** in 2021 to **11.9%** in 2025.

RECOMMENDATIONS

Based on an analysis of the causes of death for the 2021–2025 period, as well as limitations related to data quality and the processes for recording causes of death, this report provides several recommendations for improving the quality of death registration data, as follows:

First — Further improve the legal framework, professional guidelines, and terminology standardization for recording causes of death, with the aim of curbing overly vague entries and ensuring greater consistency across different localities.

Second — Standardize and improve the quality of data collection at the commune level. It is necessary to integrate automated logic-check functions into the death registration software and enhance training for civil registration officials.

Third — Improve mechanisms for linking and data sharing between the civil registration system and the health system. Establish procedures for linking data among commune-level health stations, hospitals, and civil registration authorities to facilitate the cross-verification of information.

Fourth — Invest in technological infrastructure and modernize the electronic civil registration software system-including the automated validation and coding of causes of death, cross-referencing personal information with the National Population Database, and ensuring secure, interoperable data sharing among government agencies.

Fifth — Strengthen coordination among judicial, health, and statistical authorities during the process of determining and coding causes of death.

Sixth — Strengthen public communication and raise public awareness of the importance of providing accurate information when registering a death

4. *Deaths of undetermined cause refer to cases in which the cause of death is either left blank or recorded using information that does not constitute a medically valid cause of death. Examples include entries such as "deceased," "died at home," "died outside a medical facility," "time of death unknown," "circulatory arrest of unknown cause," or "respiratory arrest," as well as entries that merely indicate the address or location where the death occurred.*

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