



VITAL STATISTICS

from administrative registries

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- **Vital Statistics and Civil Registration (MERNİS)**
- **Birth & Death Registration System in Türkiye**
- **Birth Notification System**
- **Death Notification System**
- **Birth and Death Statistics**
- **Causes of Death Statistics**
- **Marriage and Divorce Statistics**
- **Main statistical figures**

Vital Statistics

Vital statistics has an important role in determining a country's socio-cultural structure.

Vital Statistics including birth, death, marriage, divorce, suicide is a main source of information as the following issues:

- ✓ Detecting the status in the national and local level,
- ✓ Making plan effectively in the national and local level,
- ✓ Identifying of problems,
- ✓ Being able to make predictions for the future,
- ✓ Allowing international comparisons.

Coverage: The whole country

Data collection method: Administrative records

Periodicity: Annual

Vital Statistics

Data sources:

- ✓ The Ministry of Interior, General Directorate of Civil Registration and Citizenship Affairs, Central Civil Registration System (MERNIS)
- ✓ Turkish National Police, Gendarmerie General Command, the Ministry of Justice, General Directorate of Prisons and Detention Houses, Turkish General Staff and TurkStat Causes of Death Data.

Time coverage:

- ✓ Birth statistics 2001 and onwards
- ✓ Death statistics 2009 and onwards
- ✓ Marriage statistics 2003 and onwards
- ✓ Divorce statistics 2003 and onwards
- ✓ Suicide statistics 2012 and onwards

Dissemination formats: News Release, web statistics tables, database

MERNIS

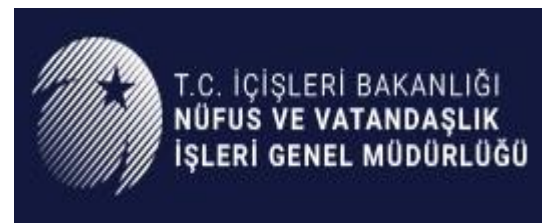
- ❑ **MERNIS** is a centrally administered system including information on vital events of **all citizens**
- ❑ **Headquarter** is in Ankara, **970 registration offices** are in districts
- ❑ **Online data transfer from the offices in districts to the Headquarter in Ankara**
- ❑ MERNIS is based on **family ledgers**
- ❑ **Maintenance of the system** supplied by **the Ministry of Interior, General Directorate of Civil Registration and Citizenship Affairs**

National Address Database (NAD)

- ❑ Established by the municipalities in coordination with TurkStat in 2006

Address Based Population Registration System

- ❑ Established by TurkStat in 2007, transferred to the Ministry of Interior



MERNIS

BEFORE 2000s

- ❑ In ledgers (paper based)
- ❑ No ID numbers for citizens and foreigners
- ❑ No updated usual residence addresses
- ❑ Late registration of vital events
- ❑ Difficulties on the data transfer to the Headquarter



AFTER 2000s

- ❑ In electronic format
- ❑ Unique ID number with 11 digits for citizens and foreigners
- ❑ Updated information on place of usual residence
- ❑ Registration of vital events on time
- ❑ Online data transfer from regional registration offices



VITAL STATISTICS

- AIM: Producing annual, accurate and qualified figures of the population size and the dynamics of the population (vital events)

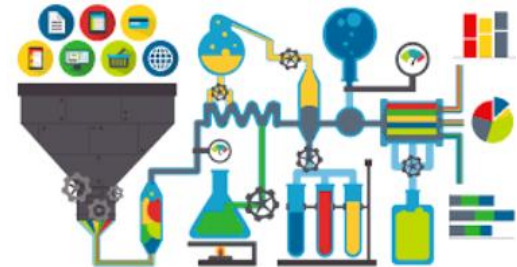
TurkStat produces vital statistics from registers
in line of Eurostat and UN recommendations

Main data source



MERNIS

Central Civil Registration System



BIRTH & DEATH STATISTICS

BEFORE 2000s

❑ Population and Housing Censuses

- . Number of live births, crude birth rate, total fertility rate
- . Number of infant deaths, infant mortality rate
- . No information on deaths in total
- . No information on detailed characteristics of mothers etc.
- . Some estimations by using indirect estimation techniques (Brass Trussell etc.)
(with 5 or 10-year interval)

❑ Demographic and Health Surveys

- . Fertility and infant mortality estimations
- . No information on deaths in total

(with 5-year interval, started in 1968, 1973, 1978,....., last in 2018)

BIRTH REGISTRATION



❑ According to the Population Law No. 5490,

Births in Türkiye must be registered **within 30 days** of the child being born to the District Population and Civil Registration Offices

(**within 60 days** - to the embassies if the birth event occurred abroad)

❑ There is **no fee**

❑ When the baby was born at the hospital, **birth certificate** is issued and given to the family before the mother leaves from hospital

❑ Who can report the birth?

- **Parents**
- **Guardian**
- **Grandfather, grandmother or adult sibling**
- **Police or gendarme officer (If baby/child found)**

BIRTH NOTIFICATION SYSTEM

- ❑ Established in 2019 (By the law on the Amendment of the Population Services Law and Some Laws" dated 19/10/2017 and numbered 7039)
- ❑ Improved by **the Ministry of Health** in cooperation with the Ministry of Interior, General Directorate of Civil Registration and Citizenship Affairs
- ❑ **Web based system**
- ❑ **Accessible** from all health centers and hospitals (government/private/university hospitals)
- ❑ Every physicians have **password** to enter the system



BIRTH NOTIFICATION SYSTEM

- E-report system was developed aiming to increase citizen satisfaction, service quality, to reduce bureaucratic procedures, to eliminate duplications in reporting and also share these with relevant governmental organizations.
- In 2019, in order to track all birth events in our country through a system and share these events with Ministry of Interior, General Directorate of Civil Registration and Citizenship Affairs, «Birth Notification System» was established and «e-birth(e-doğum) report» which is the component of e-report system was developed.

BIRTH NOTIFICATION SYSTEM

- MERNIS is still the main data source for producing birth statistics
- E-birth reports are used as secondary data source in the production of birth statistics
- Quality of e-birth reports increases year by year and TurkStat aims to utilize e-birth reports more for producing birth statistics

BIRTH NOTIFICATION SYSTEM

HOSPITAL/HEALTH CENTER

When the birth event is occurred in hospitals/health centers, information on newborn and mother are entered to the system (birth certificate) by health personnel



(online notification of birth)

REGISTRATION OFFICE

Civil registration office keeps the information according to the ID no of mother. After the application of families , ID no of newborn is assigned and identity card of baby is given to parents/relatives



APPLICATION OF A FAMILY MEMBER

Family decided the name of newborn, and one eligible family member applies to the district registration office



BIRTH NOTIFICATION SYSTEM

Information compiled from e-birth reports

- *ID number of mother,*
- *Birth date of mother,*
- *Name and last name of mother,*
- *Gestation period,*
- *Nationality,*
- *Birth date of the newborn,*
- *Time of birth,*
- *Place of birth,*
- *Sex, height, weight, head circumference of newborn,*
- *Information if the birth is multiple*

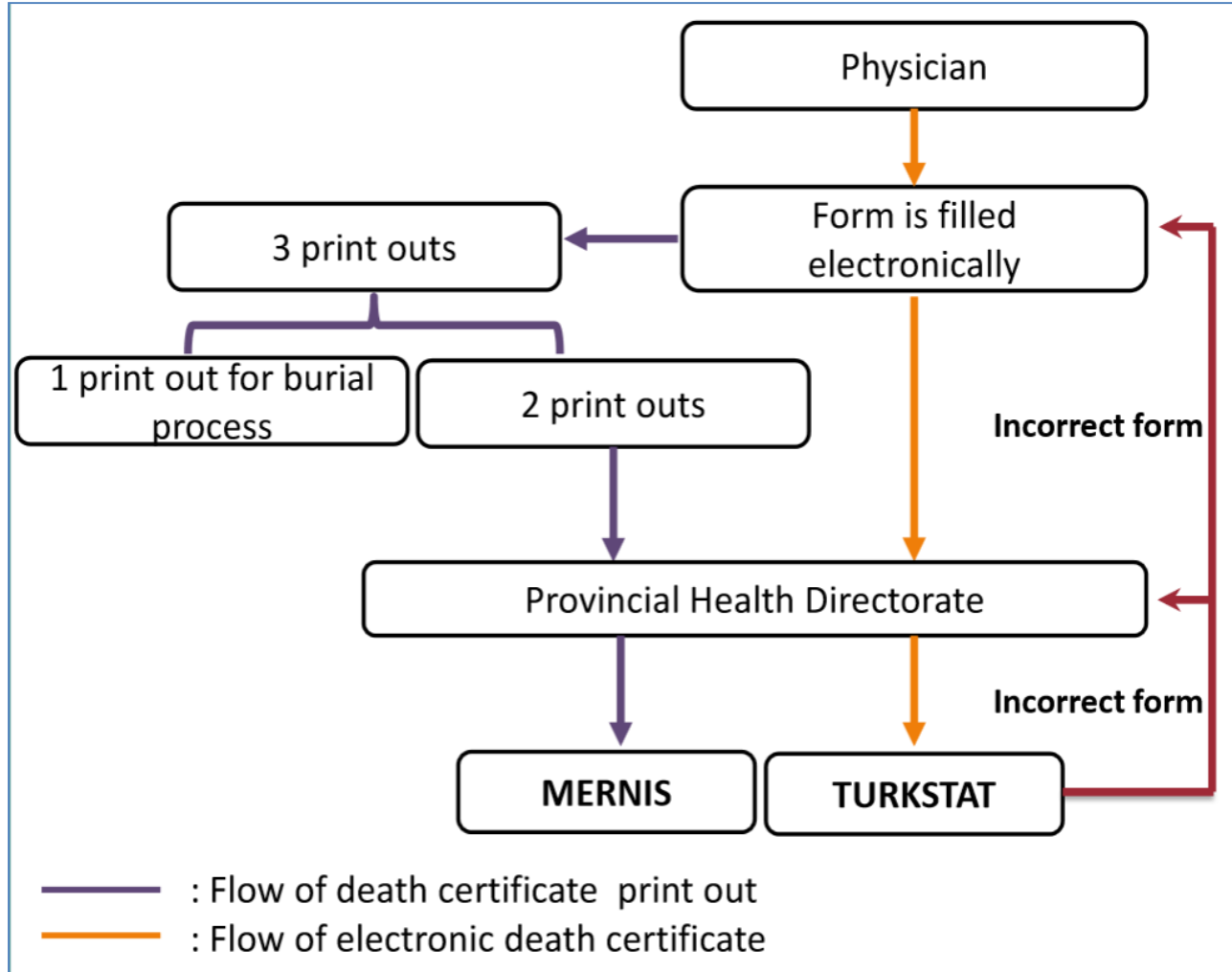
DEATH REGISTRATION

According to the Population Law No. 5490,
Deaths in Türkiye must be registered **within 10 days**
to the District Population and Civil Registration Offices
(to embassies abroad)



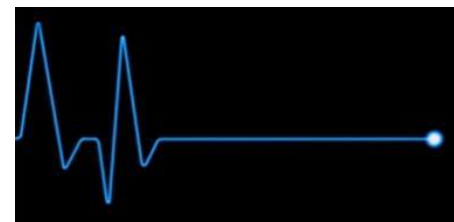
- There is **no fee**
- Who can report the death?
- **Physician**
 - **Municipality physician**
 - **Prosecutor (Forensic case)**
 - **Mukhtar (Deaths in the village)**

DEATH REGISTRATION



DEATH NOTIFICATION SYSTEM

- ❑ Improved by **the Ministry of Health** in cooperation with the Ministry of Interior, General Directorate of Civil Registration and Citizenship Affairs
- ❑ **Web based system**
- ❑ **Accessible** from all health centers and hospitals (government/private/university hospitals)
- ❑ Every physicians have **password** to enter the system
- ❑ When the **ID number of deceased person** is entered to the system, connection is provided with the Central Civil Registration System (MERNIS), and all information of deceased person come to the screen
- ❑ Physicians enter **causes of death (ICD-10)** in detail
- ❑ Causes of death information is classified by specific working groups in **26 regional offices of TurkStat in coordination with the MoH**



BIRTH STATISTICS



□ Coverage

Whole country

□ Data collection

2001-2008

Place of event

After 2009

Usual residence of mother

□ Data source

MERNIS Database

The Central Civil Registration System

The Ministry of Interior

General Directorate of Civil Registration and
Citizenship Affairs

- Birth data were **revised 5 years retrospectively** due to late registration
- New born infant deaths may not be registered as "birth" (checking the Death Notification System data)

History of data collection

Data collection period	Data collection method	Compiling Institution	Geographical Scope
1964-1980	Administrative records	TurkStat	Most populous 25 provinces
1981-31 October 1983	Administrative records	TurkStat	49 provinces
1 November 1983	Administrative records	TurkStat	Whole Türkiye
1 January 1986	Interrupted		
2001-2008	Administrative records	GDCRC	Whole Türkiye
2009 onwards	Administrative records	GDCRC TurkStat, Causes of Death Data	Whole Türkiye

BIRTH STATISTICS



- Births by sex (province/district level)
- Crude birth rate and general fertility rate (province level)
- Age specific birth rates/Total fertility rate (province level)
- Births by age group of mother and father (province level)
- Mean age of mother (province level)
- Births by legal marital status of mother (province level)
- Births by mother's duration of marriage (province level)
- Births by level of education of mother
- Births by citizenship of mother and father
- Births by mother's country of birth
- Births by mother's age group and birth order
- Proportions by birth order / Births by multiple births

DEATH STATISTICS



□ Coverage & data collection

Until 2008

Only province and district centers

After 2009

Usual residence of deceased (whole country)

□ Data source

MERNIS Database

The Central Civil Registration System

The Ministry of Interior

General Directorate of Civil Registration and
Citizenship Affairs

Death data were **revised 3 years retrospectively** due to late registration

History of data collection

Turkish Statistical Institute (TurkStat) collected data on death events;

Data compilation period	Data compilation method	Institute which compile data	Geographical coverage
1931 - 1949	Administrative registers	TurkStat	Most populous 25 provincial centers
1950 - 1956	Administrative registers	TurkStat	All provincial centers
1957 - 1985	Administrative registers	TurkStat	All provincial and district centers
1982 - 1985	Administrative registers	TurkStat	Turkey in general.
01 January 1986	Because statistical data on death events at the sub-district and village level was incomplete, the results could not be published and the gathering of data was stopped.		
1986 - 2008	Administrative registers	TurkStat	All provincial and <u>district centers</u>
2009 - 2012	Administrative registers	MoH, TurkStat	Turkey in general.
2013 and later	Administrative registers (ÖBS)	MoH, TurkStat, GDCRN	Turkey in general.

Source: TurkStat, Death Statistics, Cause of Death Statistics Metadata.

DEATH STATISTICS



- Deaths by sex (province/district level)
- Deaths by age group (province level)
- Crude death rate (province level)
- Infant mortality rate and under five mortality rate (province level)
- Age specific death rates
- Deaths by legal marital status
- Deaths by level of education
- Infant deaths by level of education of mother and father
- Births by citizenship of mother and father
- Deaths by country of birth
- Deaths by causes of death and sex
- Deaths by Statistical Regions and causes of death

BIRTH & DEATH STATISTICS

□ Dissemination

Birth Statistics

Death Statistics

Annual

on May

on June



(published as **Death and Causes of Death Statistics** in 2020)

through the official web site of TurkStat

- **Press releases**
- **Statistical tables**
- **Search from database (Central Dissemination System- MEDAS)**

CAUSES OF DEATH STATISTICS

❑ Legislative Issues

- ❑ Laws gives the main responsibility to the health institutions for the identification of death events
- ❑ For suspicious case, responsibility is shared by prosecutors and judicial physicians

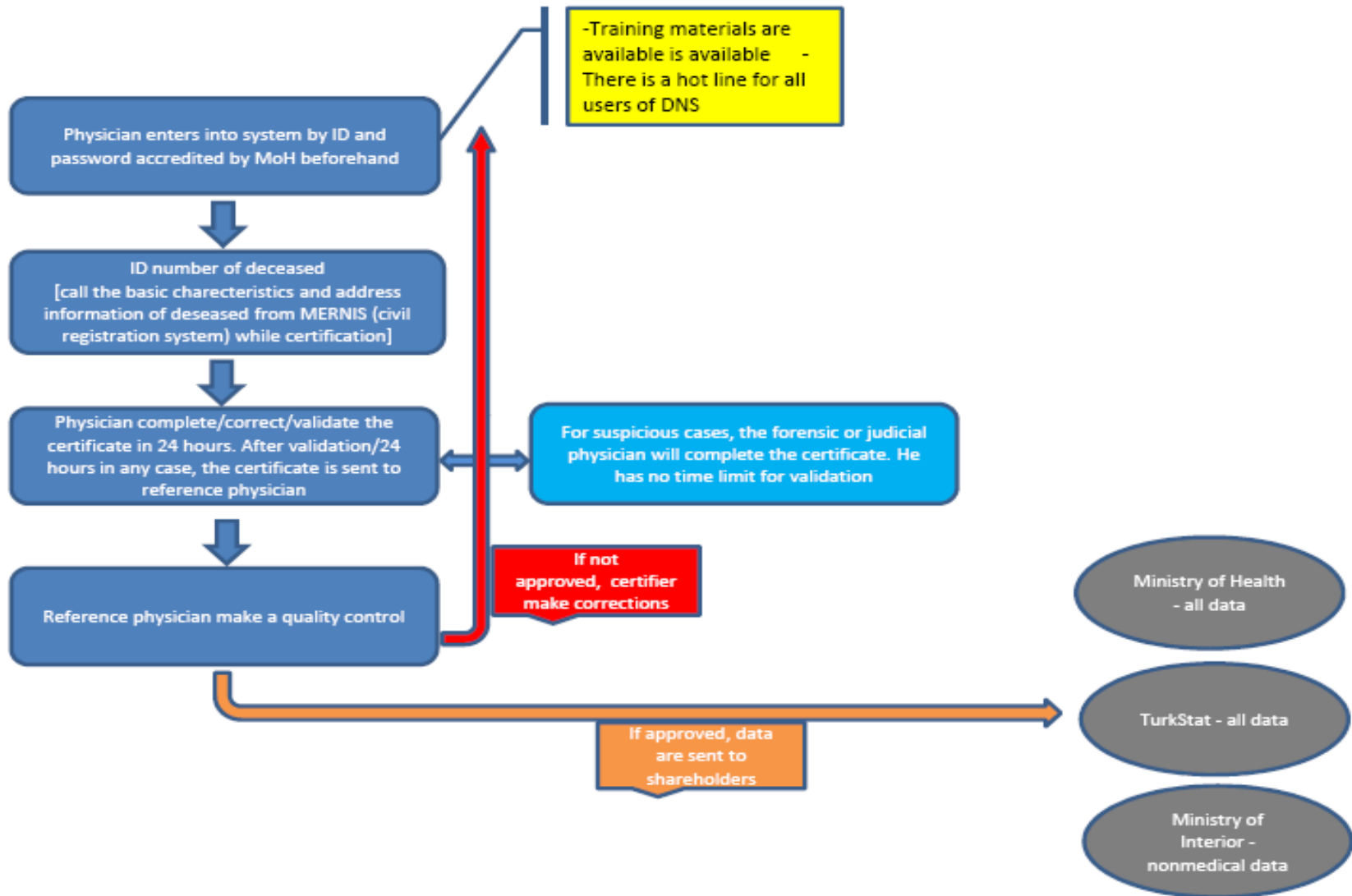
❑ Historical Background

- ❑ Between 2009-2012: International death certificate, ICD 10, Paper based (burial licence and statistical purpose)
- ❑ Since 2013: International death certificate, ICD 10, Electronic death certificate (DNS) (burial licence, statistical purpose, civil register, licences for the transportation of deceased person)

CAUSES OF DEATH STATISTICS

□ Coding

- Diagnosis coding is done at regional level in each of the 26 regions of Türkiye. There are between 2 and 10 coders in each region according to its size.
- At central level, 3 coders are in charge of quality control and training.
- All coders use a specific data entry program to access the MoH database fed with DNS to code causes of death and enter the underlying cause of death.



MARRIAGE AND DIVORCE STATISTICS

□ Data collection

Until 2002

After 2003

Data collection by forms

Place of event

□ Data source

MERNIS Database

The Central Civil Registration System

The Ministry of Interior

General Directorate of Civil Registration and
Citizenship Affairs

Municipalities report marriage events to the District Population and Civil Registration Offices within 10 days (within 30 days abroad)

Courts report divorce events to the District Population and Civil Registration Offices within 10 days



MARRIAGE & DIVORCE STATISTICS

□ Dissemination

Annual

Marriage and Divorce Statistics

on February

through the official web site of TurkStat



- Press releases
- Statistical tables
- Search from database (Central Dissemination System- MEDAS)

Marriage and Divorce statistics were **revised 1 year retrospectively** due to late registration (first time in 2020)

MARRIAGE STATISTICS

- **Marriages (province/district level)**
- **Crude marriage rate (province level)**
- **Marriages by age group of spouses (province level)**
- **Average age at marriage (province level)**
- **Mean age at first marriage (province level)**
- **Previous marital status of spouses**
- **Marriages by country of birth of spouses**
- **Marriages by citizenship of spouses**

DIVORCE STATISTICS

- **Divorces (province level)**
- **Crude divorce rate (province level)**
- **Divorces by age group of couples (province level)**
- **Divorces by cause of divorce (province level)**
- **Divorces by duration of divorce case (province level)**
- **Divorces by duration of marriage (province level)**
- **Divorces by number of children given to parent's guardianship**
- **Divorces by country of birth of couples**
- **Divorces by citizenship of couples**

TurkStat Website- www.turkstat.gov.tr

TUIK TURKISH STATISTICAL INSTITUTE

DATA PORTAL FOR STATISTICS

Search in Products **Search**

Popular Searches : [population](#) [export](#) [cpi](#) [migration](#)

169 Subjects
3,508 Bulletins
624,938 Indicators
60,127,857 Values
1,974 Statistical Table

[Main Page](#) [TURKSTAT Main Page](#) [Geographic Statistics Portal](#) [National Data Page](#)

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STATISTICAL THEMES



Agriculture



Construction and
Housing



Economic Confidence



Education, Culture,
Sport and Tourism



Employment,
Unemployment and
Wages



Environment and
Energy



Foreign Trade



Health and Social
Protection



Income, Living,
Consumption and
Poverty



Industry



Inflation & Price



Justice and Election



National Accounts



Population and
Demography



Science, Technology
and Information Society



Trade and Services



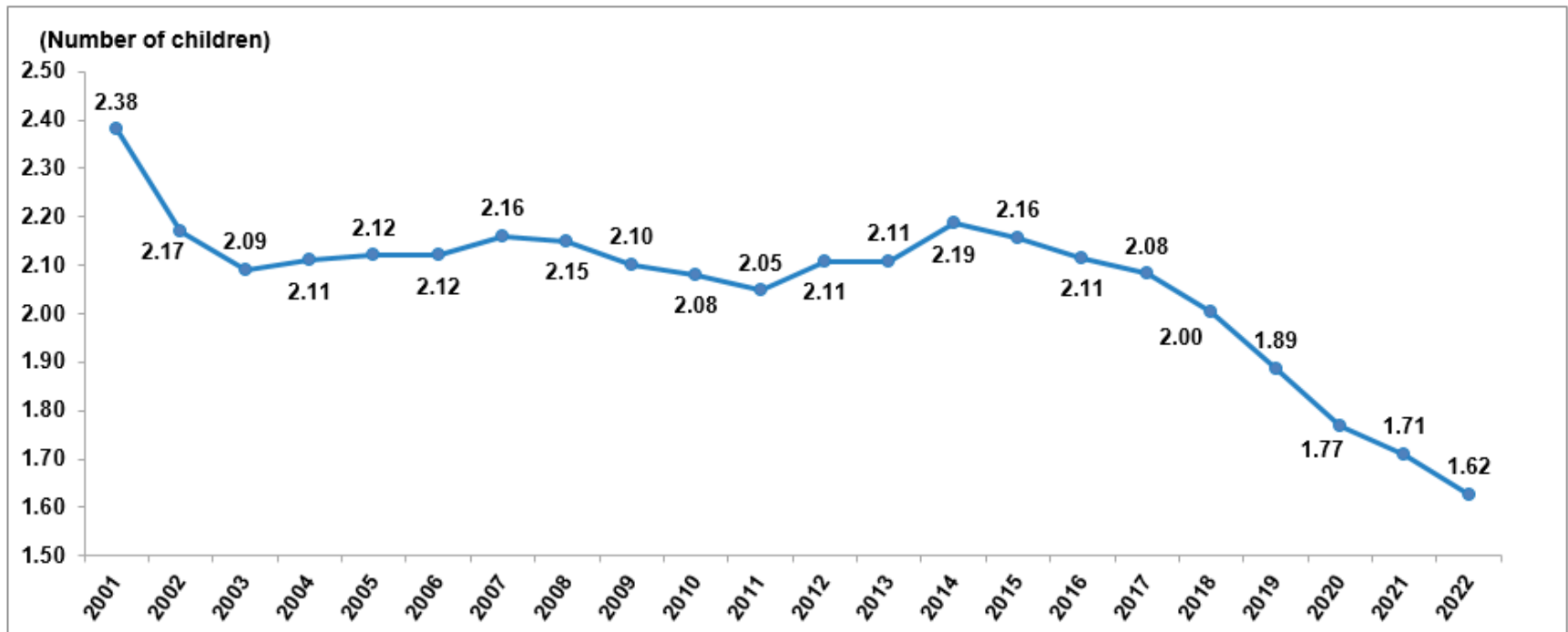
Transportation and
Communication

BIRTH STATISTICS

Year	Number of births	Crude birth rate (per thousand)	Total fertility rate (Number of children)
2001	1 323 341	20.3	2.38
2002	1 229 555	18.6	2.17
2003	1 198 927	17.9	2.09
2004	1 222 484	18.1	2.11
2005	1 244 041	18.2	2.12
2006	1 255 432	18.1	2.12
2007	1 289 992	18.4	2.16
2008	1 295 511	18.2	2.15
2009	1 266 751	17.6	2.10
2010	1 261 169	17.2	2.08
2011	1 252 812	16.9	2.05
2012	1 294 605	17.2	2.11
2013	1 297 505	17.0	2.11
2014	1 351 088	17.5	2.19
2015	1 336 908	17.1	2.16
2016	1 316 204	16.6	2.11
2017	1 300 258	16.2	2.08
2018	1 256 282	15.4	2.00
2019	1 189 939	14.4	1.89
2020	1 117 942	13.4	1.77
2021	1 083 336	12.9	1.71
2022	1 035 795	12.2	1.62

BIRTH STATISTICS

Total fertility rate, 2001-2022



DEATH STATISTICS

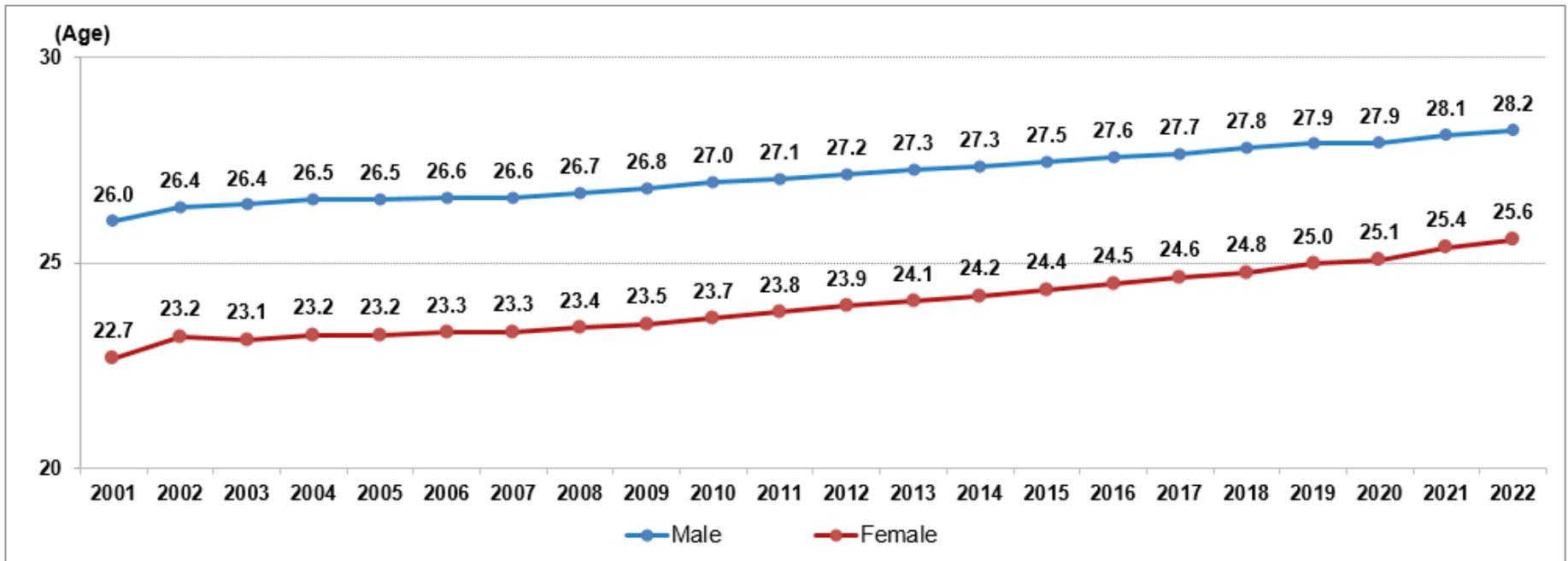
Year	Number of deaths	Crude death rate (‰)	Number of infant deaths	Infant mortality rate (‰)	Under five mortality rate (‰)
2009	369 703	5.13	17 607	13.90	17.65
2010	366 471	5.01	15 164	12.02	15.46
2011	376 162	5.07	14 567	11.63	14.85
2012	376 520	5.01	14 974	11.57	14.36
2013	373 041	4.90	14 027	10.81	13.39
2014	391 091	5.07	14 951	11.07	13.28
2015	405 528	5.18	13 677	10.23	12.36
2016	422 964	5.34	12 910	9.82	11.98
2017	426 662	5.31	12 103	9.33	11.34
2018	426 449	5.24	11 598	9.26	11.35
2019	435 941	5.28	10 770	9.10	11.20
2020	507 938	6.09	9 657	8.65	10.64
2021	565 594	6.72	9 938	9.20	11.23

MARRIAGE & DIVORCE STATISTICS

Year	Number of marriages	Crude marriage rate (‰)	Number of divorces	Crude divorce rate (‰)
2001	544 322	8.35	91 994	1.41
2002	510 155	7.73	95 323	1.44
2003	565 468	8.47	92 637	1.39
2004	615 357	9.10	91 022	1.35
2005	641 241	9.37	95 895	1.40
2006	636 121	9.18	93 489	1.35
2007	638 311	9.10	94 219	1.34
2008	641 973	9.04	99 663	1.40
2009	591 742	8.21	114 162	1.58
2010	582 715	7.97	118 568	1.62
2011	592 775	7.99	120 117	1.62
2012	603 751	8.03	123 325	1.64
2013	600 138	7.88	125 305	1.65
2014	599 704	7.77	130 913	1.70
2015	602 982	7.71	131 830	1.69
2016	594 493	7.50	126 164	1.59
2017	569 459	7.09	128 411	1.60
2018	554 389	6.81	143 573	1.76
2019	542 314	6.57	156 587	1.90
2020	488 335	5.86	136 570	1.64
2021	563 140	6.69	175 779	2.09
2022	574 358	6.76	180 954	2.13

MARRIAGE & DIVORCE STATISTICS

Average mean age at first marriage, 2001-2022

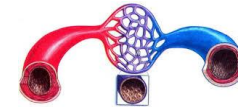


Causes of Death Statistics

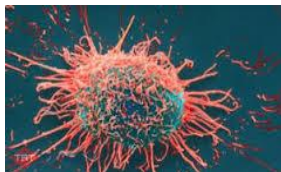
Number of deaths in 2021: 565 594

Share of older persons in total deaths: 72.7%

First 3 causes of death for older population



	Total	Male	Female
1. Diseases of the circulatory system	37.6	34.3	41.1
2. Diseases of the respiratory system	15.0	16.1	13.9
3. Neoplasms	12.0	15.3	8.5



THANK YOU . . .
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