

Statistical product – Vital statistics / demographic statistics / quarterly, yearly /, number of population / annual, quarterly / life expectancy / yearly/ name of births / half-yerly, yearly/

Processes	Sub-processes	Sub-process description
<i>1 Specify needs</i>		
	1.1 Identify needs	<p>The necessity to maintain the vital statistics is primarily stipulated by the need to ensure the periodical update of the calculations related to the population number, gender and age structures and main demographic indicators by administrative and territorial division, as well as by the constantly growing demand of users of statistical information and structural units of the Armstat.</p> <p>The groups of vital statistics indicators, in case of need, are provided to the statistical data users: the state and local government bodies of RA, scientific and academic institutions, international organizations and other interested institutions, following the legislative requirements on their confidentiality. The information on vital statistics is used in the socio- demographic, as well as economic and financial field in order to develop strategies, solve the strategic tasks, to reveal the development trends and other purposes.</p>
	1.2 Consult and confirm needs	<p>The Draft Annual Statistical Program is submitted to 147 (due to financial restrictions) main statistical information users (government agencies, educational institutions, judicial bodies, banking system, business sphere, NGOs, international organizations and mass media) selected by the sampling method in order to study their opinions.</p> <p>The users’ opinions about statistical information are studied by business discussions as well as through the “User satisfaction survey questionnaire” which is available on Armstat website (see:</p>

		https://www.armstat.am/am/?nid=131).
	1.3 Establish output objectives	<p>The statistical program is the basis for the implementation of statistics in the territory of RA. The five years program is developed for the determination of the directions of the statistical activity and the annual program is developed to determine the measures to ensure the realization of these directions.</p> <p>The program sets the list of indicators included in statistical observations implemented by the Statistical Committee of RA and by other state institutions, Armstat overall coordinates the list (and their collection, processing, summarizing, publishing activities), as well as the calculation works.</p> <p>The directions of activities and actions envisaged by the Annual and Five -Year Statistical Programs should take into account the comparability of country indicators with the international statistical standards, provide with possible stable periodicity of trends from the viewpoint of their revealing during the long term and provide with the proportion of resources foreseen for statistics on annual basis.</p> <p>The program is developed based on the study of the demand of statistical information users, as a result, the suggestions and comments are summarized. Armstat regularly defines its objectives to develop the statistical database on population migration aimed at harmonization with international standards.</p>
	1.4 Identify needs	<p>Life Births. The “Complete expulsion or extraction from its mother of a product of conception. Which, after such separation, breathes or shows any other evidence of life such as the beating of the heart, pulsation of the umbilical 2 cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached”? All the 500gr and over live birth cases are submitted to registration by regional Civil Acts Registration Offices (CARO).</p> <p>Still birth. The “Complete expulsion or extraction from its mother of a product of conception, which, after such separation, does not breathe or does not show any other evidence of life such as the beating of the heart, pulsation of the umbilical cord, or definite</p>

movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached". Only the 500gr and over (after twentieth week births) and still birth cases are submitted to registration by regional Civil Registration Bodies and included in data on perinatal mortality.

Perinatal mortality. Perinatal mortality is a combined concept that covers death of fetus in the perinatal period, beginning from 22 weeks of gestation up to the process of birth delivery as well as the death occurring during the birth delivery and before the first 168 hours of life (7 full days). Fetal death.

The fetal death (deadborn fetus) death prior to the complete expulsion or extraction from it smothers of a product of conception, irrespective of the duration of the pregnancy. The death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life such as heartbeat, umbilical cord pulsation, or definite movement of voluntary muscles.

Infant mortality. Infant mortality is the death of infants in the first year of life.

Child mortality indicator. Child mortality rate represents the ratio of the number children died at the age of 0-4 to the number of live births. Before 2003 the elaboration of the death acts 3 was conducted in accordance with the ICD IX (International Disease Classification) and since 2004 the reviewed ICD -X. Due to this fact the comparability of some data groups is impossible. Maternal mortality. Maternal mortality is the death of women due to pregnancy irrespective of its duration, which occurred during pregnancy or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its processing, but not from accidental or incidental cause.

Life expectancy after birth is the amount of years which born generation will live on average , with the condition , that during the lifetime of this generation, at the transition to the next age, mortality at each age will be equal to population mortality on the level of a given period.

<p>1.5 Check data availability</p>	<p>The availability of the indicators of vital statistics in output tables is being clarified.</p> <p>1. Completeness of registered births, by the existence of stillbirth by Yerevan (district communities), marzes, regions , and as well as existence of multiple births, number of births by the birth months, number of live births by mother's age, marital status, birth order, marz, ethnicity and educational level of the mother.</p> <p>2. Completeness of registered stillbirth by Yerevan (district communities) and marzes, regions, by the months of the death , age, causes of death, place of death, by the document certifying the death, nationality, level of education.</p> <p>3 Deaths of 0-1 years old children, by the days , months lived, month of death and birth date, gender, causes of death.</p> <p>4. Completeness of registered marriages by Yerevan (district communities) and marzes, regions , by the months, age of bride and groom, as well as marriage periodicity.</p> <p>4. Completeness of registered divorces by Yerevan (district communities) and provinces, regions ,by the months, gender , age, number of children, duration of the dissolved marriage.</p>	
<p>1.6 Prepare business case</p>	<p>Second examples of acts related to vital statistics: birth, death, marriage and divorce are provided to the Armstat marz agencies on monthly basis, by the Civil Acts Registration Offices of RA Ministry of Justice for statistical registration purposes. Then, each month, the Armstat marz agencies provide the second copies of these acts, in the defined period to the Armstat according to the “Annual Statistical program”. The second copies of these acts on birth, death, marriage and divorce are directly provided to the Armstat Yerevan City department by the the Cicil Acts Registration Offices of Yerevan city territorial units where they are processed and summarized. Currently, together with paper acts, also electronic versions of mentioned acts are provided to Armstat (According to the memorandum of cooperation, dated 03.04.2015 which was signed by the between the RA Minister of Justice and the President of Statistical Committee of RA on providing data from common electronic management system of civil acts registration to the Armstat as well as due to statistical program, to</p>	

		make available summary statistical data to the RA Ministry of Justice. Upon full completion of experimental process of their statistical processing, the complete transition to the electronic forms will be made.
<i>2Design</i>		
	2.1 Design output	The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", as well as the Resolution No. 05-N of RA State Council on Statistics "On Approval of the Procedure for the collection of statistical data" dated 20 June 2016 and Resolution "On Approval of Annual Statistical Program".
	2.2 Design variable description	<p>The basis for vital statistics are:</p> <p>Some indicators related to birth available in acts: month of birth registration act, first name, last name, gender, number of children, live birth or stillbirth, which child it is, birth day, month, year, place of birth, mother's and father's time of birth, level of education, occupation, nationality and marital status.</p> <p>In the acts of death: death registration month, day, gender, educational level, marital status, nationality, death and birth month, year, place, cause of death. For children, that died at the age of 0-1 year old number of days lived.</p> <p>In the acts of marriage: month of marriage, spouses birth date, marital status, occupation and education.</p> <p>In the acts of divorce: month of divorce registration act , birth date of spouses, marital status, occupation, education, which marriage it is, total number of the children</p>
	2.3 Design collection	<p>Original data source for population vital statistics is administrative records of the Civil acts registration office that include information on births and deaths as well as marriages and divorces. Statistical databases formed based on the data contained in acts of civil status, include similar data related to children gender, date of birth, parents' age, education level, marital status, age and gender, the death main reason, place of death, as well as spouses and divorces.</p> <p>The collection of information is carried out by the method of collecting civil registrations acts (paper version) on monthly basis. At the same time, data processing functions on information electronic collection are also tested.</p>

	2.4 Design frame and sample	Data collection on vital statistics of population is implemented by the widespread method using data from administrative sources.
	2.5 Design processing and analysis	After statistical data collection the statistical indicators are separated by the RA regions (city / village), are encoded and undergo computer processing (logical and completeness control) and if needed, through contact with relevant authorities presenting information, necessary adjustments on indicators are made.
	2.6 Design production systems and workflow	From the collection and until the publication of data the working processes are carried out based on Annual Statistical Programs.
<i>Build</i>		
	3.1 Build collection instrument	For obtaining data on natural movement of population of the RA, birth, death, marriage, divorce acts serve as basis , made by the territorial divisions of the civil acts registration office of the RA Ministry of Justice, second examples of which for obtaining statistical data, on monthly basis, are provided to the RA Statistical Committee, through marz agencies (paper copy). The latter present second copies of the acts to the Statistical Committee of RA due to terms of “Annual Statistical Program”. Together with mentioned acts the Armstat marz agencies also present the Form No. 97 on “Civil acts registration office summary papers”on monthly basis. The Armstat is implementing the chekings related to the compliance of digital data and actual number of acts of Form No. 97 summary papers, presented by marz agencies. Currently, preliminary work is carried out in order to provide statistical processing of data of the above mentioned information, obtained by electronic formats.
	3.2 Build or enhance process components	There are methodical guidelines and instructions required for crosscheck of information. Birth, death, marriage and divorce

		acts, relating to every marz, are grouped on the basis of the RA former administrative districts, according to separate urban communities and rural areas. In input software have necessary tools to implement the arithmetical, logical and classification checkups of the input data.
	3.3 Build or enhance dissemination components	<p>The main users of statistical information are the RA government, academic and non-governmental organizations and individuals, regional institutions and local self-government bodies, marz and structural units of the Armstat, as well as international organizations.</p> <p>According to the requirements of the Statistical Program, statistical data on natural movement of population is included in publications, in the databases available in official website of the Armstat, “ArmStatBank.am”. The information is provided to the users in the case of official requests keeping the statistical confidentiality.</p>
		<p>The derivation of statistical product is carried out by the following successive stages:</p> <ol style="list-style-type: none"> 1. collection of information, 2. arithmetic and logical checks and adjustments, 3. classification by administrative-territorial divisions, 4. digital coding, 5. information input through the pre-designed input software, 6. comparison of received data with the corresponding time series, 7. The application of information for internal purposes, 8. Preparation of publications, 9. The provision of summary statistical data to users.
	3.5 Test production system	The preparation of the comparative results of output indicators from data warehouse formed by the processing of data by paper and electronic forms.
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	3.7 Finalize production system	-
<i>Collection</i>		

	4.1 Create frame and select sample	The general population of information on natural movement of population is formed on relevant information received from the regional bodies of CARO.
	4.2 Set up collection	The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", as well as the Resolution No. 05-N of RA State Council on Statistics "On Approval of the Procedure for the collection of statistical data" dated 20 June 2016 and Resolution "On Approval of Annual Statistical Program".
	4.3 Run collection	Data collection is carried out by the Armstat territorial units, marz/Yerevan city department through the mail/by hand, according to the provisions of the Resolution of RA State Council on Statistic No 05-N on the "Approval of the Procedure of the collection of Statistical Data" dated 20 June 2016. According to the memorandum of cooperation, dated 03.04.2015 which was signed by the between the RA Minister of Justice and the President of Statistical Committee of RA on providing data from common electronic management system of civil acts registration to the Armstat as well as due to statistical program, to make available summary statistical data to the RA Ministry of Justice.
	4.4 Finalize collection	The collected data, after digital coding, automated processing, is input in the electronic environment. Then it is subjected to arithmetical and logical checking.
5 Elaboration		
	5.1. Integrate date	The basis for indicator formation are data contained in the second copy of acts on birth, death, marriage and divorces provided monthly by the territorial units of Civil Acts Registration offices of RA Ministry of Justice. The source of information is theis the doctor's records on causes of death made in medical certificates. The mentioned documents together with the act on death are also provided to the Armstat for statistical processing.

	5.2 Classify and code	<p>The collected data is classified and encoded</p> <ul style="list-style-type: none"> • The regions, towns and villages of RA according to the “Classification of Division of administrative-territorial units”. • Nationalities according to the “Handbook on classifications of nationalities”, that has been jointly developed by the Chair of Ethnography of Yerevan State University, Institute of Archaeology and Ethnography of National Academy of Sciences of the Republic of Armenia and IStatistical Committee of RA and approved by the Resolution No. 69 of the RA State Council on Statistics dated 10 September 2001. • Occupations according to the “Occupations’ Model Dictionary”, by the first main digit classification, developed by the Interstate Statistical Committee of the Commonwealth of Independent States and approved by the Resolution N44 of RA State Statistical Council on Statistics dated 10 September 2001. • Education according to the predefined coding order.
	5.3 Review and approval	<p>The accuracy checks of completeness and logical chains of indicators received in different output tables are implemented. Meanwhile, the e information on the number of births, deaths, marriages and divorces is compared with the relevant information provided by the Armstat marz agencies in the the summary papers of form No-97.</p>
	5.4 Edit and impute	<p>During the processing the data on natural movement of population can be edited and updated by adding some missing data.</p>
	5.5 Derive new variables and units	<p>After conducting the population census, the assesements imputations and assessments are carried out. The estimates and calculations are made after the conduction of population census by counting the adjusted demographic indicators based on the number of re-assessed population.</p>
	5.6 Calculate weight	<p>–</p>
	5.7 Calculate aggregates	<p>The summary data by separate statistical indicators are derived based on the input data through the pre-designed software.</p>
	5.8 Finalize data files	<p>Often, based on the needs of users (including international</p>

		organizations), to obtain additional statistical data, the derivation of complex groups based on the information available in the database is implemented, using simultaneously some combinations of indicators available in database of the natural movement.
<i>Analysis</i>		
	6.1 Prepare draft outputs	The creation of groups, indicators, as well as time series of statistical indicators is implemented based on obtained summary statistical data.
	6.2 Validate outputs	The methodological requirements to the received indicators are strictly followed during the whole process of receiving according to the pre-defined classifications, methodological guidelines and relevant international recommendations.
	6.3 Interpret and explain of outputs	The logical analysis of the received summary indicators is carried out taking into account the dynamics of the indicators for the previous years.
	6.4 Apply disclosure control	The confidentiality of statistical indicators (not containing individual (personal) data) that is subject to publication, as well as requested by the users of statistical information is strictly followed according to the Law on Official Statistics and the Resolution of the SCS No 53 " Approval of the Order on Protection of Statistical Confidentiality" dated 25 June 2001, and only summarized data are provided (see: https://www.armstat.am/file/doc/99454478.pdf).
	6.5 Finalize outputs	Before the dissemination of the summary data, the analysis of the indicators of the natural movement of population is carried out.
<i>Elaboration</i>		
	7.1 Update output system	The work on the derivation and final checking of relevant tables of statistical indicators that are subject to publication is carried out, as well as the time series update is implemented. In case of the need the changes and/ or additions are made in the concepts and methodological explanations of the relevant indicator.
	7.2 Produce dissemination products	All the production steps are implemented for the disseminating products: preparation of explanatory text, tables, charts and other materials, editing of these products and making them compliant with publishing standards.

		<p>The information on the statistical indicators is published in Armenian, Russian, English in the yearbooks, statistical handbooks and monthly informational reports.</p> <ul style="list-style-type: none"> • Statistical Yearbook of Armenia (annual) • Armenia in figures (annual) • Social- economic Situation of the Republic of Armenia (quarterly) • RA Marzes and Yerevan city by figures (annual) • Demographic handbook of Armenia (annual) • Women and Men in Armenia (annual) <p>Handbooks and publications are available on official web-site of Armstat</p> <p>(http://www.armstat.am/am/?nid=45 http://www.armstat.am/am/?nid=80):</p>
	7.3 Manage release of dissemination products	In the case of the changes and adjustments made in the indicators provided by the providers of statistical information the indicators already published by the Armstat are also being changed and adjusted correspondingly.
	7.4 Promote dissemination products	Various information presented on the Armstat official website (indicators, metadata, notifications, news about the sphere, micro-data, etc.) is not only a statistical tool, but also dissemination tool of information on the Armstat activity, which promotes the effectiveness of the sector's activities.
	7.5 Manage user support	In case of the official request by the users of statistical information, the information is provided at possible extend following the principle of confidentiality of statistical information.
<i>Evaluation</i>		
	8.1 Gather evaluation input	The statistical data collection is carried out from the single administrative source that are the the territorial units of the Civil acts registration office of the RA Ministry of Justice (in paper form and since 01.07.2015also on-line). Due to the lack of information from other sources, the reliability assessment is not available.
	8.2 Conduct evaluation	-

	8.3 Agree an action plan	-
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