



# MEDICO-SOCIAL PROBLEMS OF MORBIDITY: TYPES AND ANALYSIS OF SICKNESS RATE

*Guidelines to the practical lesson  
for students in the specialties 222 "Medicine"  
and 228 "Pediatrics" on the course "Social Medicine,  
Public Health (Public Health)"*

МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ  
Харківський національний медичний університет

**MEDICO-SOCIAL PROBLEMS  
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**МЕДИКО-СОЦІАЛЬНІ ПРОБЛЕМИ  
ЗАХВОРЮВАНOSTІ:  
ВИДИ І АНАЛІЗ ЗАХВОРЮВАНOSTІ**

*Методичні вказівки  
до практичного заняття студентів  
спеціальностей 222 «Медицина» та 228 «Педіатрія»  
з дисципліни «Соціальна медицина,  
громадське здоров'я» (Громадське здоров'я)*

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## GUIDELINES FOR TOPIC TRAINING

**The aim of the class:** to study the types and analysis of the population morbidity.

**Students need to know:**

➤ **Programme Issues:**

- types of morbidity that are studied in Ukraine;
- state and trends of the Ukrainian population morbidity; differences in the morbidity of urban and rural populations, different age and gender groups;
- study of the overall morbidity: unit of the monitoring, accounting documents, rules for their completion;
- the methodology for determining the indicators of primary morbidity and prevalence of diseases, their evaluation, the dynamics of indicators of general morbidity, regional features;
- features of accounting of the infectious and hospitalized morbidity; morbidity of the most important socially significant diseases and morbidity with temporary disability;
- accounting documents, rules for their completion;
- method of determining the indicators of these types of morbidity, their assessment, dynamics and regional characteristics of indicators of individual types of morbidity in the population.

➤ **Main international and national legal normative documents on the topic:**

- Fundamentals of the legislation of Ukraine on health (adopted by the Verkhovna Rada of Ukraine on November 19, 1992 № 2801-XII);

➤ **Accounting and reporting documentation:**

- *statistical coupon for registration of final (refined) diagnoses (f. 025-2/0);*
- *an ambulatory patient coupon (f. 025-6/0);*
- *an ambulatory patient coupon (abbreviated version) (f. 025-7/0);*
- *emergency notification of an infectious disease, food, acute occupational poisoning, an unusual response to vaccination (f. 058/0);*
- *notification about a patient who is diagnosed for the first time in his life with active tuberculosis, venereal disease, trichophytosis, microsporia, favus, scabies, trachoma, mental illness (f. 089/0);*
- *notification about a patient with a first-time diagnosis of cancer or other malignant disease (f. 090/0);*
- *notification of a case of syphilis, gonococcal, chlamydial infection, urogenital mycoplasmosis and trichomoniasis (f. 089-1/0);*
- *control card of the dispensary observation (f. 030/0);*
- *list of persons subject to periodic medical examination (f. 122/0);*
- *card of the person subject to medical examination (f. 123/0);*
- *statistical card of the patient who left the hospital (f. 066/0);*
- *a leaflet of incapacity for work;*

- *report on the causes of temporary incapacity for work (f. 23-TN);*
- *medical certificate of death (f. 106/0-95);*
- *medical certificate of perinatal death (f. 106/2-95);*
- *feldsher's certificate of death (f. 106/1-95);*

**Need to be able:**

- To fill in the main accounting documents for registration of different kinds of morbidity as well as analyze indicators of these types of diseases

**Recommended literature**

**Basic literature**

1. Abhaya Indrayan, Rajeev Kumar Malhotra Medical Biostatistics 4<sup>th</sup> edition / I. Abhaya, R. Malhotra. – Chapman&Hall/CRC Biostatistics Series, 2017. – 994 p. URL : [https://www.routledge.com/Medical -Biostatistics/Indrayan-Malhotra/p/book/971498799539](https://www.routledge.com/Medical-Biostatistics/Indrayan-Malhotra/p/book/971498799539)
2. Alderson Michael R. Mortality, Morbidity and Health Statistics : textbook / M. Alderson. – London: Palgrave, 1988. – 501 p. URL : <https://link.springer.com/book/10.1007/978-1-349-09068-6#toc>
3. Detels Roger, Beaglehole Robert, Lansang Mary Ann, Gulliford Martin Oxford Textbook of Public Health Online (Oxford Medical Publications) 5<sup>th</sup> edition / R. Detels et al. – Oxford: Oxford University Press, 2011. – 1769 p. URL : <https://www.amazon.com/Oxford-Textbook-Public-Medical-Publications/dp/0199693471>
4. Devakumar Delan, Hall Jennifer, Qureshi Zeshan, Lawn Joy The Unofficial Guide to Medicine : textbook / D. Devakumar et al. – Oxford: University Press, URL : <https://unofficialguidetomedicine.com/oxford-textbook-of-global-health-of-women-newborns-children-and-adolescents/>
5. Medical Book Online Park's Textbook of Preventive And Social Medicine – 24<sup>th</sup> Edition 2020 URL : <https://medicalbooknew.com/medical-book-online-parks-textbook-of-preventive-and-social-medicine-24th-edition2020>
6. Methodical materials on the subject “Public Health” developed by teachers of Public Health and Healthcare Management Department (KhNMU).
7. Summary of Lectures lectures in Public Health / Kharkiv National Medical University, Department of Public Health and Healthcare Management.

**Additional literature**

1. Detels Roger, Gulliford Martin, Quarraisha Abdool Karim, Chorh Chuan Tan Oxford Textbook of Global Public Health, 6<sup>th</sup> edition / R. Detels et al. – Oxford: Oxford University Press, 2017. – 1728 p. URL : <https://global.oup.com/academic/product/oxford-textbook-of-global-public-health-9780198810131?cc=ua&lang=en&>
2. International Encyclopedia of Public Health, 2<sup>nd</sup> Edition / Editor in Chief: Stella R. Quah. – Singapore: Academic Press, 2017. – 4470 p. URL : <https://www.elsevier.com/books/international-elcyclopedia-of-public-health/quah/978-0-12-803678-5>

3. Tulchinsky Theodore, Varavikova Elena The New Public Health, 3<sup>rd</sup> Edition / T. Tulchisky, E. Varavikova. – Toronto: Academic Press, 2015. – 912 p. URL : <https://www.elsevier.com/books/the-new-public-health/tulchinsky/978-0-12-415766-8>
4. White Kenneth R., Griffith John R. The Well-Managed Healthcare Organization, 9th Edition / K. White, J. Griffith. – USA: Health Administration Press, 2019. – 558 p. URL : <https://www.amazon.com/Well-Managed-Healthcare-Organization-AUPHA-Book/dp/1640550585>

### **Information Resources**

1. European Health for All Database (HFA-DB) [electronic resource] – [www.euro.who.int/hfad/](http://www.euro.who.int/hfad/)
2. National Scientific Medical Library of Ukraine – <http://www.library.gov.ua/>
3. Population of Ukraine. Demographic Yearbook – [www.ukrstat.gov.ua](http://www.ukrstat.gov.ua)
4. Scientific Library of Kharkiv National Medical University – <http://libr.knmu.edu.ua/index.php/biblioteki>
5. U.S. National Library of Medicine – <http://www.nlm.nih.gov/>
6. Vernadsky National Library of Ukraine – <http://www.nbu.gov.ua/>

### **THEORETICAL MATERIAL FOR CLASS TRAINING**

Population morbidity is one of the most important indicators of public health characteristics along with fertility, mortality, life expectancy, physical development and the primary output of disability.

Morbidity is a complex medical-statistical indicator of the structure and quality of diseases, which shows the level and frequency of the spread of all diseases, and each separate one, among the population as a whole and in a definite age, social, gender and other kind of groups.

Studying the morbidity depends on the medical-social and economic significance of pathology. Five main types of pathology are distinguished:

- 1) general morbidity;
- 2) infectious morbidity;
- 3) morbidity of the principle non-epidemic diseases;
- 4) hospitalized morbidity;
- 5) and morbidity with temporary disability.

Types of morbidity are formed in such a way that the social, medical and economic significance of these diseases is taken into account:

- infectious morbidity has an epidemic importance because it requires rapid antiepidemic measures in response to the emerging focus of infection;
- hospital morbidity its data are used to plan the effective and rational use of bed capacity and has a great economic importance for the health system;
- morbidity with temporary disability has an economic, social and medical importance because it covers the able-bodied population;

– and non-epidemic morbidity is the most important because it gives an information on the prevalence of socially determined diseases.

### **1. General morbidity**

**General morbidity** (prevalence, morbidity) is the aggregate of all diseases (acute and chronic, traumas, poisonings, etc.) that are registered in the population living in a certain territory for a certain period of time.

Analysis the general morbidity of the population according to the population's referring to the TPI (treatment prophylactic institutions) performs:

- over the past decades there has been an increase in diseases;
- in Ukraine, the general morbidity is 1 813.1 ‰, with an increase of 11.0 % over the 5-year period;
- the general morbidity rate among the children is also increasing; it is 1,885.8 ‰ (9. 0% growth).

The main factors that affect the increase in the level of general morbidity in countries with transitional economies are:

- 1) the spread of risk factors for diseases (smoking, alcohol drinking, and drugs consumption);
- 2) aging of the population and the associated to it the increasing the multiple pathologies;
- 3) socio-economic and ecological status;
- 4) increase in the incidence of low-income population;
- 5) the organization of medical care at the primary stage, taking into account the patient's state of health;
- 6) late seeking for medical help (worsened cases of the disease or complications);
- 7) awareness of the public about health issues and the factors that form it;
- 8) and finally, completing the accounting documents for the registration of diseases.

**There are some basic levels of prevalence of diseases among the population:**

- a) at the 1<sup>st</sup> place are diseases of the blood circulatory system – 517 ‰;
- b) at the 2<sup>nd</sup> one are respiratory diseases – 348.2 ‰;
- c) and at the 3<sup>rd</sup> place are digestive diseases – 169.5 ‰.

These above-mentioned levels cover 60.0 % of cases among all registered diseases.

**In the structure of the prevalence of diseases among children aged 0–14 years, there can be identified:**

- at **the first place** are respiratory diseases (51.2 %);
- at **the second** one are digestive diseases (7.2 %);
- at **the third place** are diseases of the endocrine system (5.1 %).

For more detailed study of the morbidity of the population, the primary morbidity is distinguished from the general morbidity rate.

**Primary morbidity** (own morbidity) is a set of new diseases that have not been accounted before and reported for the first time in the life of the population in the reporting year.

The primary morbidity in Ukraine is **702.8 ‰**, for the last 3 years, its growth was 4.6 %. In the Kharkov region it reached **784,0 ‰**

Primary morbidity in children since 2002 (1 243.72 ‰) increased by 19.8 % and amounted to **1 333.6 ‰**.

The primary morbidity of the population aged 18 to 100 years is 566.46 ‰;

**Among the diseases that have the highest levels of the primary morbidity, should be noted such ones:**

– respiratory diseases 284.0 ‰ cases (41.5 %);

– diseases of blood circulatory system 52.4 ‰ ones (7.4 %);

– injuries, accidents and poisoning 49.1 ‰ cases (7.0 %).

These 3 classes accounts more than 55 % in the structure of the primary population morbidity.

**Accounting documents of general and primary population morbidity.**

1. “Statistical coupon for registration of final (refined) diagnoses” (f. 025-2/0).

2. “An ambulatory patient coupon” (f. No. 025-6/0, f. 025-7/0).

General and primary morbidity is studied on the basis of the current registration of all patients’ initial referrals.

**Referral** is the first patient’s visit to a doctor (or doctor’s visit to a patient for a year in the case of each disease).

Primary referral for *chronic* diseases is the *first* referral in connection with the exacerbation of this disease, if a diagnosis is made at the first time in life, then this case is considered as a *primary disease*.

At *acute* diseases, every case of seeking for medical help is considered as a primary one.

A case of a disease or trauma, for which the patient visited medical institution is the unit of observation in the study of general morbidity.

In statistical coupons for the registration of final diagnoses, acute and newly diagnosed chronic diseases are indicated by the sign “+”, and acute treatment with the sign “-”. In the ambulatory patient coupon there is a special graph indicating the primary or repeated referral.

“An ambulatory patient coupon” expands opportunities for analysis of morbidity. With the help of this document, it is also possible to determine the indicators of the frequency of exacerbations of chronic diseases, and separately the level of the first time registered acute or chronic diseases, etc.

There are some important criteria that characterized the general and primary morbidity. Structural indicators of this type of morbidity depend on the nosologic form, gender, age, place of residence, etc.



Among the factors influenced on the level of morbidity, the following ones are distinguished:

- gender and age structure of the population;
- completeness of the diseases registration;
- the combined influence of environmental factors, etc.

## **2. Infectious morbidity**

Infectious diseases are subject to a special accounting. This is due to the need for rapid implementation of anti-epidemic measures.

General infectious morbidity in Ukraine is 42.2 ‰, the primary one is 29. ‰; in the Kharkov region, 34.4 ‰ and 27.4 ‰ respectively.

**Obligatory registration and accounting are subject to such** diseases: typhoid fever; paratyphuses; infections caused by salmonellosis; brucellosis; all forms of dysentery and some others. The list of diseases is periodically changed and regulated by the Ministry of Public Health of Ukraine.

Cases of especially dangerous diseases (plague, cholera, smallpox, AIDS) are necessarily a subject of special registration, and notification of them is sent immediately not only to the sanitary-epidemiological station (SES), but also to the emergency anti-epidemiological commission (EAEC), as well as to the Ministry of Public Health.

**The unit of observation** in the study of infectious morbidity is each case of an infectious disease or suspicion for it.

If they are detected, the “*Emergency notification of an infectious disease, food, acute professional poisoning, and an unusual reaction to an inoculation*” is filled (form No. 058/0). It is also the main accounting document in the study of the epidemic incidence rate.

Emergency notification is completed by a doctor of an outpatient clinic, hospital, ambulance or other medical and preventive institution, in rural areas there should be a paramedic who has established or suspected an infectious disease.

All urgent notifications must be sent within 12 hours to the sanitary-epidemiological stations at the place of detection of the disease, regardless of the patient’s place of residence.

Emergency messages in the SES are registered in a special journal (f. 060/0). On the basis of “Emergency Notices” monthly and annual reports are prepared (“Report on individual infections and parasitic diseases”, form 1).

**For the analysis of infectious morbidity the following indicators are calculated:**

- prevalence of general and primary infectious diseases;
- seasonality of infectious morbidity;
- frequency of hospitalization and completeness of its coverage (in the first case it is the ratio of the number of hospitalized patients to the population, in the second one – to the number of identified diseases, as a percentage);

- frequency of diseases by age, gender, and occupation (ratio of the number of diseases in the corresponding group to the population of this group);
- the number of identified bacilli carriers per 1000 surveyed people.

### **3. Morbidity in the most important socially significant diseases**

**Morbidity in the most important socially significant diseases** is subject of special accounting due to their epidemiological and social significance (malignant neoplasms, venereal, mental diseases, tuberculosis, and etc.).

*The need for special registration of these diseases is caused by:*

- a high level of spread;
- the incidence of disability caused by them;
- a significant mortality rate for some of them;
- epidemiological significance;
- social conditioning;
- and large economic costs of society.

The following documents are used for registration of the most important social diseases:

1. Notification about a patient who is diagnosed for the first time in his/her life with active tuberculosis, venereal disease, trichophytosis, microsporia, favus, scabies, trachoma, mental illness (*form No. 089/0*).

2. Notification about a patient with a first-time diagnosis of cancer or other malignant disease (*form No. 090/0*).

The accounting documents are filled in by the doctors of all medical and preventive institutions, who established the diagnosis for the first time when patients were referred to a polyclinic, during examination in a hospital, as well as visiting a sick person at home or under preventive medical examination, and were sent to the relevant profile specialized dispensaries (antituberculous, oncological, dermatovenereological, psychoneurological), which record and analyze the nosological form (general and primary morbidity of these forms, their structure, depend on the gender, age, place of residence, profession, etc.

**The most important socially significant diseases include:** diseases of the circulatory system; malignant neoplasms; accidents, injuries, poisoning; diabetes; obesity; mental disorders; tuberculosis; HIV / AIDS; drug addiction; alcoholism; and nicotineomania.

### **4. Hospitalized morbidity**

The hospitalized morbidity makes it possible to analyze the composition of patients treated at the hospital. Inpatient care is the most expensive medical care, and therefore, when it is used, there must be sufficient medical or social justification.

The unit of observation in such study is each case of hospitalization of a patient for a definite disease, and the accounting statistical document is “Statistical card of the patient who left the hospital” (form No. 066/0).

The statistical card is filled in by the attending physician simultaneously with the “Medical card of the inpatient patient” on the day of his/her discharge from the hospital or in the case of the patient’s death.

Data on the hospitalized morbidity are important for planning bed capacity and determining the population’s need for various types of inpatient care.

The hospitalized morbidity in Ukraine is 19.4 cases per 100 inhabitants, in the Kharkiv region it is about 18.3 %.

The bed capacity is 88.5 per 10,000 of population, in Kharkiv region it is lower, about 85.4 %.

After reformation of health care system in Ukraine, it is planned to reduce the provision of the population with a bed capacity of up to 80 per 10 thousand people.

***The hospitalized morbidity is analyzed using the following indicators:***

– ***the prevalence of hospitalized morbidity among the population*** (the ratio of the number of people hospitalized for a particular disease or all hospitalized in calculating the number of people living in a certain area);

– ***structure of hospitalized people*** (the proportion of each disease in the total number of hospitalized patients, it is possible to calculate the structure of hospitalized patient’s by age, gender, and place of residence);

– ***the average length of stay of the patient in the hospital*** (the ratio of the total number of bed-days to the number of patients treated in hospital), this indicator should be associated with the age of patients, nosological forms, the results of treatment and analyzed separately for discharged and deceased patients in the hospital.

To analyze the use of hospital beds at hospital together with the indicator of the average length of stay of the patient in the hospital, *the average annual employment of a bed and turnover of the bed are also calculated.*

## **5. Incidence of temporary disability**

This type of morbidity refers to all cases that led to the non-appearance of a worker or an employee at work.

The morbidity of workers leads to significant economic losses of society, which explains the great socio-economic significance of this problem.

The unit of observation is every case of disability.

The accounting document for registration of a case of temporary incapacity for work of an employee during the year is ***a disability sheet.***

Disability sheets are issued by the attending physicians of medical and preventive institutions and are provided at the place of work with a view to obtaining benefits for the state compulsory social insurance.

Based on the disability sheets, a ***“Report on the causes of temporary incapacity for work” is compiled (form No. 23-TN).*** It includes information about incapacity for work in connection with the most common diseases, in

connection with care of a sick person, with the leave during pregnancy and childbirth, sanatorium treatment, etc.

Reports the form No. 23-TN on the causes of temporary incapacity for work medical institutions generate on a quarterly basis, and on the basis of them, semi-annual and annual ones are completed.

With the help of the “Report on the causes of temporary incapacity for work”, the morbidity with temporary disability is analyzed, with the calculation of 4 main indicators:

- the number of cases of temporary incapacity for work for 100 employees;
- the number of days of temporary incapacity for work for 100 employees;
- average duration of one case;
- and structure of diseases due to temporary incapacity for work.

To clarify the impact of working conditions on the health of workers, assess the effectiveness of health improvement measures, mainly at large enterprises, an in-depth record of the incidence with temporary disability is conducted. It is based on the personal record of diseases among employees, which requires filling in each employee with a “**Personal morbidity registration card**”, which contains information on all cases of disability throughout the year with their main characteristics: diagnosis, duration, place of issue of the sheet, gender, age, length of work, etc.

***Such an account provides additional information about:***

- long and often ill people throughout the year;
- the proportion of people who are ill during the year;
- the proportion of persons who are not ill during the calendar year (health index).

***For selection of people to a group of long and often sick ones, some factors are used, such as:***

- etiological one;
- number of losses of incapacity for work;
- and number of days of disability.

**The group of often sick people includes workers and employees if they have:**

- 4 or more cases of etiologically related diseases for the current year;
- 6 or more cases of etiologically unrelated diseases for the current year.

**The group of long time sick people includes workers and employees if they have:**

- 40 and more days of incapacity for work related to diseases, etiologically related to each other;
- 60 and more days of incapacity for work if the diseases are etiologically unrelated to each other.

## PRACTICAL ASSIGNMENTS

On the basis of situational problems presented in the manual (p. 107–109):

- calculate indicators of morbidity of the population;
- compare the obtained indicators with the data for the country;
- make conclusions.

To do this, you must transfer the data to your variant in Table 1, calculate the indicators, record them in Table 2, compare and make conclusions.

Table 1

### Initial data for the calculation of indicators of morbidity among the population according to the data of referrals to treatment and prophylactic institutions

#### General morbidity

Region	Number of population		Number of cases of disease		The number of individual diseases among the general population				
	Total	Including children (0–14 years)	Among all population	Including children (0–14 years)	Neoplasms	Diseases of the blood circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Injuries, poisoning
	1803	342	3072	617	67	701	724	308	81

#### Primary morbidity

Region	Number of cases of disease		The number of individual diseases among the general population				
	Among all population	Including among children (0–14 years)	Neoplasms	Diseases of the blood circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Injuries, poisoning
	1346	439	14	90	585	66	72

#### Calculation of the main indicators of morbidity.

##### Prevalence of diseases (morbidity, general morbidity):

The number of all diseases registered at the first treatment in the current year, both acute and chronic ones (identified in the current year and in previous years) is 3,072,000

$$\times 1000 = 1703.8 \text{ ‰}$$

Average annual population – 1,803,000

##### Prevalence of diseases (general morbidity) among children (0–14 years):

The number of all diseases registered at the first treatment during the current year, both acute and chronic ones, among children aged 0-14 years (identified in the current year as well as in previous years) is 617,000

$$\times 1000 = 1804 \text{ ‰}$$

The average annual number of children of this age is 342,000

### **Prevalence of oncological diseases:**

The number of all cancer diseases registered at the first treatment in the current year (identified in the current year and in previous years) is 67,000

$$\frac{67,000}{\text{Average annual population} - 1,803,000} \times 1000 = 37.1 \text{ ‰}$$

### **Prevalence of diseases of the blood circulatory system:**

The number of all blood circulation diseases registered at the first treatment in the current year (identified in the current year and in previous years) is 701,000

$$\frac{701,000}{\text{Average annual population} - 1,803,000} \times 1000 = 388.7 \text{ ‰}$$

### **Prevalence of respiratory diseases:**

The number of all respiratory diseases registered at the first circulation in the current year (identified both in the current year and in previous years) is 724,000

$$\frac{724,000}{\text{Average annual population} - 1,803,000} \times 1000 = 401.5 \text{ ‰}$$

### **The prevalence of diseases of the digestive system:**

The number of all digestive diseases registered at the first treatment in the current year (identified in the current year and in previous years) is 308,000

$$\frac{308,000}{\text{Average annual population} - 1,803,000} \times 1000 = 170.8 \text{ ‰}$$

### **Prevalence of injuries and poisonings:**

The number of all injuries and poisonings among the population registered at the first referral the current year is 81,000

$$\frac{81,000}{\text{Average annual population} - 1,803,000} \times 1000 = 44.9 \text{ ‰}$$

### **Structure of the overall morbidity:**

The number of registered diseases of the circulatory system in the current year is 701,000

$$\frac{701,000}{\text{The number of all registered diseases is } 3,072,000} \times 100 = 22.8 \text{ ‰}$$

The number of registered oncological diseases in the current year is 67,000

$$\frac{67,000}{\text{The number of all registered diseases is } 3,072,000} \times 100 = 2.1 \text{ ‰}$$

The number of registered respiratory diseases in the current year is 724,000

$$\frac{724,000}{\text{The number of all registered diseases is } 3,072,000} \times 100 = 23.5 \text{ ‰}$$

The number of registered digestive diseases in the current year is 308,000

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The number of all registered diseases is 3,072,000

$$\frac{308,000}{3,072,000} \times 100 = 10 \%$$

The number of registered injuries and poisonings in the current year is 81,000

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The number of all registered diseases is 3,072,000

$$\frac{81,000}{3,072,000} \times 100 = 2.6 \%$$

**Primary morbidity (actual morbidity):**

The number of first-time diagnosed diseases in the current year is 1,346,000

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Average annual population – 1,803,000

$$\frac{1,346,000}{1,803,000} \times 1000 = 746.5 \text{ ‰}$$

**Primary morbidity among children (0-14 years):**

The number of first-time diagnosed diseases among children 0–14 years old this year is 439,000

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The number of children aged 0–14 is 342,000

$$\frac{439,000}{342,000} \times 1000 = 1283.6 \text{ ‰}$$

**Primary oncological morbidity:**

The number of first-time diagnosed diseases in the current year is 14,000

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Average annual population – 1,803,000

$$\frac{14,000}{1,803,000} \times 1000 = 7.7 \text{ ‰}$$

**Primary morbidity of the blood circulatory system:**

The number of first-time diagnosed diseases of the circulatory system in the current year is 90,000

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Average annual population — 1,803,000

$$\frac{90,000}{1,803,000} \times 1000 = 49.9 \text{ ‰}$$

**Primary morbidity of respiratory system:**

The number of first-time diagnosed diseases of the respiratory system in the current year is 585,000

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Average annual population – 1,803,000

$$\frac{585,000}{1,803,000} \times 1000 = 324.4 \text{ ‰}$$

**Primary morbidity of digestive system:**

The number of newly diagnosed diseases of the digestive system in the current year is 66,000

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Average annual population – 1,803,000

$$\frac{66,000}{1,803,000} \times 1000 = 36.6 \text{ ‰}$$

## Traumatism:

The number of the injuries detected for first time in the life, accidents and poisonings in the current year – 72,000

$$\frac{72,000}{\text{Average annual population} - 1,803,000} \times 1000 = 39.9 \text{ ‰}$$

Table 4.2

### Comparison and analysis of general and primary morbidity in the region General morbidity

Data	The general prevalence of diseases		The overall prevalence of individual classes of diseases among the general population				
	Among all population	Among children (0–14 years)	Neoplasms	Diseases of the blood circulatory system	Diseases of respiratory system	Diseases of digestive system	Injuries, poisoning
Calculated	1703.8 ‰	1804 ‰	37.1 ‰	388.8 ‰	401.5 ‰	170.8 ‰	44.9 ‰
Around the country	1745.7 ‰	1844.85 ‰	37.03 ‰	517.84 ‰	348.24 ‰	169.54 ‰	50.7 ‰
Note	Reduced	Reduced	Reduced	Reduced	Increased	Increased	Reduced

### Primary morbidity

Data	Primary morbidity		Primary morbidity among the whole population by separate classes of diseases				
	Among all population	Among children (0–14 years)	Neoplasms	Diseases of the blood circulatory system	Diseases of respiratory system	Diseases of digestive system	Injuries, poisoning
Calculated	746.5 ‰	1283.6 ‰	7.7 ‰	49.9 ‰	324.4 ‰	36.6 ‰	39.9 ‰
Around the country	706.05 ‰	1491.1 ‰	3.31 ‰	52.4 ‰	284.65 ‰	29.5 ‰	49.1 ‰
Note.	Increased	Reduced	Increased	Reduced	Increased	Increased	Reduced

### Analysis and conclusion:

When analyzing the indicators we obtained, there is a decrease in the general and primary morbidity among the adult population, among the children there is a decrease in the overall incidence and an increase in the rates of primary morbidity as compared to the general data for the country.

### Activities to improve work:

To reduce the rates of general and primary morbidity, as well as certain types of it, measures should be taken for improvement the quality and availability of medical care. Rational allocation of available health resources between health facilities and various types of care should be carried out. In addition, the medical staff of medical and preventive institutions should be provided with full staffing, personnel should be upgraded, the material and technical base improved, modern diagnostic and therapeutic technologies should be introduced, continuity between different types of assistance should be provided, hygienic training of the population, dispensary supervision, measures



to improve the effectiveness of medical examinations, it is necessary to improve the functioning of information-analytical department for the organization of primary statistical accounting and the preparation of reports.

### TEST TASKS

1.\*\* To assess the state of the population health, there was compiled and analyzed the report on diseases registered in the population of the service area of the medical and prophylactic institution (F. 12). What indicator based on this report can be determined?

- A. *Hospitalized patients morbidity.*      D. *General nonepidemic morbidity.*  
B. *Morbidity with temporary disability.*  
C. *General morbidity.\**      E. *Pathology prevalence.*

2. According to the data based on the population's visits to healthcare institutions, different types of morbidity are studied. What of the following kinds of morbidity below refers to the data of the visits?

- A. *Incidence of respiratory diseases.*  
B. *Acute morbidity.*  
C. *Circulatory system morbidity.*  
D. *General morbidity.\**  
E. *Pathology prevalence in the population.*

3. Which of the following indicator can be determined based on the data of population size and the total number of registered first visits of the population to healthcare institutions?

- A. *Pathology prevalence in the population.*      D. *Actual morbidity.*  
B. *Primary morbidity.\**      E. *Disease ratio.*  
C. *Prevalence of diseases (general morbidity).*

4. By the end of the year, the general morbidity rate in the pediatrician K. practice has increased by 75 %. Which of the following should be examined first of all to determine the cause of such growth?

- A. *It is necessary to examine household conditions.*  
B. *It is necessary to examine parents' health.*  
C. *It is necessary to examine the financial condition of families.*  
D. *It is necessary to examine the morbidity structure.\**  
E. *It is necessary to examine the level of sanitary culture of parents.*

5. Which of the following are the levels of general morbidity based on the population's visits to healthcare institutions are typical for Ukraine (per 1,000 population)?

- A. *400–600.*      C. *1000–1300.*      E. *1600–1800.*  
B. *700–900.*      D. *1400–1600.\**

6. Based on the population's visits to healthcare institutions, the general morbidity in different regions of Ukraine significantly ranges. Determine, which of the following levels are average for the whole Ukraine (in ‰)?

- A. 500–700.                      C. 1400–1600.\*                      E. 2000 and more.  
B. 800–1200.                      D. 1700–2000.

7. At the analysis of morbidity in population, the intensive indicators are necessarily calculated. Which of the following ones is an environment for the calculation of this indicator?

- A. *Number of hospitalized patients.*  
B. *Number of patients subject to medical examinations.*  
C. *Number of patients who received a sick-list.*  
D. *Number of population.\**  
E. *Number of deaths.*

8. Extensive indicators are calculated to characterize the structure of the general morbidity. Which of the following ones is the environment for calculating this indicator?

- A. *Absolute number of diseases found during the examination.*  
B. *Absolute number of all registered diseases based on the data of the visits.\**  
C. *Population size.*  
D. *Number of examined patients.*  
E. *Number of working patients.*

9. In the given year, in the doctor K. practice in City Hospital No. 2, there were 1,300 cases of acute diseases, 5 cases of the first established diagnosis of chronic and 35 chronic diseases, detected for the first time in previous years. Which of the following specify the data that are necessary for the calculation of the “prevalence” of diseases:

- A. 5; 35.                      C. 1,300; 5.                      E. 1,300; 5; 35.\*  
B. 1,300.                      D. 1,300; 35.

10. During the analysis of morbidity in schoolchildren of age groups 7–10, 11–14 and 15–17 years it was established that one kind of disease is widespread the most. Which is the following determine it?

- A. *Respiratory diseases.\**                      D. *Infectious diseases.*  
B. *Skin diseases.*                      E. *Injuries and poisoning.*  
C. *Diseases of digestive organs.*

11. The diseases of the respiratory, circulatory and digestive systems have the highest prevalence in the population of Ukraine. Indicate, which of the following diseases take the first place in general population morbidity:

- A. *Respiratory diseases.*                      D. *Oncological diseases.*  
B. *Diseases of digestive organs.*                      E. *Injuries, accidents, poisoning.*  
C. *Circulatory system diseases.\**

12. Respiratory, blood circulation and digestive diseases occupy the first three places in general morbidity in the Ukrainian population. Indicate which of the following diseases occupy the third place in the structure of the morbidity prevalence in the population.

- A. *Respiratory diseases.*
- B. *Circulatory system diseases.*
- C. *Diseases of digestive organs.\**
- D. *Oncological diseases.*
- E. *Injuries, accidents, poisoning.*

**13.** Respiratory, blood circulation and digestive diseases occupy the first three places in general morbidity in the Ukrainian population. Indicate which of the following diseases take the second place in the morbidity prevalence in the population.

- A. *Respiratory diseases.\**
- B. *Circulatory system diseases.*
- C. *Diseases of digestive organs.*
- D. *Oncological diseases.*
- E. *Injuries, accidents, poisoning.*

**14.** During the reporting year, in the city N with population of 20,000, there were registered 14,000 cases of diseases identified for the first time in life. Determine which of the following health indicator can be calculated using this data?

- A. *Individual types of morbidity.*
- B. *Pathology prevalence.*
- C. *Primary morbidity.\**
- D. *Prevalence of diseases.*
- E. *Morbidity structure.*

**15.** A family doctor studies the primary morbidity among the patients of his practice. Determine which of the following provisions is the method for calculation of this kind of morbidity?

- A. *Number of diseases registered for the first time in a given year (all acute + for the first time revealed chronic diseases) / average annual population.*
- B. *Number of diseases registered for the first time in a given year (all acute + for the first time in life revealed chronic diseases)  $\times$  1,000 / average annual population.\**
- C. *Number of registered acute diseases  $\times$  1000 / average annual population.*
- D. *Number of registered chronic diseases  $\times$  1000 / average annual population.*
- E. *Number of chronic diseases registered for the first time in a given year / average annual population.*

**16.** Primary morbidity at a rural medical site with a service radius of 3–5 km is 420 cases per 1,000 inhabitants. In the area to which this site belongs, the primary morbidity rate is 650 ‰. Determine which of the following the most probable cause of low morbidity on this site.

- A. *Population migration.*
- B. *Incomplete accounting of diseases.\**
- C. *Low level of sanitary culture of the population.*
- D. *Ageing of population.*
- E. *Conducted preventive measures.*

**17.** One of the indicators characterized the morbidity of the population, is primary morbidity. Which of the following formulas is used for calculation of primary morbidity?

- A. *Number of all diseases registered in the population / average annual population.*

- B. *Number of diseases registered for the first time in a given year (all acute + for the first time revealed chronic diseases)  $\times$  1,000 / average annual population.\**
- C. *Number of registered acute diseases  $\times$  1,000/average annual population.*
- D. *Number of chronic diseases registered for the first time in a given year / average annual population.*
- E. *Number of registered chronic diseases  $\times$  1,000 / average annual population.*
- 18.** Which of the following are the levels of primary morbidity based on the visits to healthcare institutions are typical for Ukrainian population (per 1,000 population)?
- A. 300–500.                      C. 900–1100.                      E. 1500–1700.
- B. 600–800.\*                      D. 1200–1400.
- 19.** Indicate, which of the following diseases take the first place in frequency in the structure of primary morbidity of population:
- A. *Respiratory diseases.\**                      D. *Oncological diseases.*
- B. *Diseases of digestive organs.*                      E. *Injuries, accidents, poisoning.*
- C. *Endocrine system diseases.*
- 20.** Indicate, which of the following diseases take the third place in frequency in the structure of primary morbidity of population:
- A. *Respiratory diseases.*                      D. *Oncological diseases.*
- B. *Diseases of digestive organs.*                      E. *Injuries, accidents, poisoning.\**
- C. *Endocrine system diseases.*
- 21.** General morbidity of the population is studied on the basis of the current registration of all visits due to acute, chronic diseases and exacerbations of chronic ones in medical and prophylactic institutions. Determine, which of the following main accounting document is used in the general morbidity study?
- A. *Outpatient medical record.*
- B. *Statistical coupon for registration of final (specified) diagnoses and sick lists.*
- C. *Statistical coupon for the registration of final (specified) diagnoses and an outpatient coupon.\**
- D. *Statistical coupon for the registration of the final (specified) diagnoses, the statistical card of the patient who is discharged from hospital.*
- E. *Statistical coupon for registration of the final (specified) diagnoses, a slip for doctor's appointment.*
- 22.** Different accounting documents are used for registration and study of general morbidity. Which of the following documents registered general morbidity?
- A. *Journal of registration of dispensary patients.*
- B. *Child's record.*
- C. *Outpatient medical record.*
- D. *The statistical card of the patient discharged from the hospital.*
- E. *Statistical coupon for registration of the final (specified) diagnosis.\**

23. This year, in the area of the polyclinic 1,450 diseases per 1,000 population were registered, including 650 cases with the diagnosis established for the first time. On the basis of which of the following official document are these indicators calculated?

- A. *Doctor's diary.*
- B. *Journal of patients registration.*
- C. *Outpatient medical record.*
- D. *Sick list.*
- E. *Statistical coupon for registration of the final (specified) diagnosis.\**

24.\*\* The chief physician of the polyclinic gave a task to the district doctor to determine the incidence of N disease on the site. What document determines the primary morbidity of the population on the site?

- A. *Journal of preventive examinations.*
- B. *Outpatient medical record.*
- C. *Statistical coupons with mark "+".\**
- D. *Statistical coupons with marks "+" and "-".\**
- E. *Doctor's appointment slip.*

25.\*\* The chief physician of the Polyclinic gave a task to the district doctor to determine the prevalence of N disease on the site. What document determines the prevalence of diseases on the medical site?

- A. *Journal of preventive examinations.*
- B. *Card of the patient discharged from hospital.*
- C. *Statistical coupons with mark "-".\**
- D. *Statistical coupons with marks "+" and "-".\**
- E. *Doctor's appointment slip.*

26. A therapist studies the level of general morbidity in the population of the site. Which of the following statistical accounting document was used for this purpose?

- A. *Outpatient medical records.*
- B. *Statistical coupons with marks "+" and "-".\**
- C. *Statistical coupons with mark "-".\**
- D. *Statistical cards of patients discharged from hospital.*
- E. *Statistical coupons with mark "-".\**

27.\*\* A therapist studies the level of general morbidity in the population of the rural site. Which statistical document is the source of this information?

- A. *Outpatient medical record.*
- B. *Medical card of prophylactically examined.*
- C. *Control card of the dispensary examination.*
- D. *Statistical coupon for registration of the final (specified) diagnoses.\**
- E. *Doctor's appointment slip.*

28.\*\* The district doctor should characterize the morbidity of population on the site for drawing up an annual report on activity of polyclinic. What documents are used to register and study general morbidity?

- A. *Child's record, outpatient coupon.*

- B. *A sick list, a statistical coupon of discharged from a hospital.*
- C. *Outpatient medical record, statistical coupon for registration of the final diagnosis.*
- D. *Outpatient coupon, statistical coupon for the registration of final diagnosis.\**
- E. —.
- 29.\*\*** During an outpatient reception, a district therapist established a diagnosis of “acute bronchitis”. Which accounting document should the doctor fill in to register the disease?
- A. *Case history.*
- B. *Sick list.*
- C. *Statistical card of the patient discharged from the hospital.*
- D. *Statistical coupon for registration of the final diagnosis.\**
- E. *Expedited report of infectious disease.*
- 30.** The family physician at an outpatient reception has found in the patient hypertension and included him to the dispensary account. Determine, which of the following statistical documents should the doctor fill in this case?
- A. *Outpatient card, sick list.*
- B. *Card of the patient discharged from hospital, control card of the dispensary follow-up.*
- C. *Statistical coupon for registration of specified (final) diagnosis, outpatient card, and control card of dispensary follow-up.\**
- D. *Statistical coupon for registration of specified (final) diagnosis, control card of clinical follow-up, report on chronic disease.*
- E. *Slip for doctor’s appointment, the outpatient card.*
- 31.** A district therapist conducts an outpatient reception. Which of the following statistical document does the doctor use to account the visits to the polyclinic?
- A. *Diary of a doctor.*
- B. *Control card of the dispensary follow-up.*
- C. *Statistical coupon for registration of the final (specified) diagnosis.\**
- D. *Doctor's appointment slip.*
- E. *Expedited report of acute infectious disease.*
- 32.** The primary visit for medical care in the healthcare institution for acute disease for the calculation of the general morbidity is:
- A. *Every visit for acute disease.\**
- B. *First visit due to acute disease, if it has led to hospitalization of the patient.*
- C. *First visit due to acute disease, at which a sick-list was issued.*
- D. *First visit due to acute disease with duration not less than 3 days.*
- E. *First visit, if acute diseases are aetiologically related.*
- 33.** The primary visit for medical care in the healthcare institution for chronic disease for the calculation of the general morbidity is:
- A. *Every visit due to exacerbation of chronic disease.*
- B. *The first visit due to exacerbation of chronic disease in the current year.\**

- C. *The first visit due to exacerbation of chronic disease, which has led to hospitalization of the patient.*
- D. *The first visit due to exacerbation of the chronic disease, at which a sick-list was issued.*
- E. *First visit due to exacerbation of a chronic disease with duration not less than 3 days.*
- 34.\*\*** The patient, who is under the dispensary follow-up due to gastric ulcer, visited a polyclinic three times during the calendar year with a therapeutic and diagnostic purpose and two times for periodic health examination. What case of outpatient service will be considered as a primary one?
- A. *The first visit in a calendar year.*
- B. *The first visit in a calendar year for this purpose.\**
- C. *The first visit in a calendar year with a diagnosis registered earlier.*
- D. *The first visit in a month.*
- E. *The first visit for the last 12 months.*
- 35.** Which of the following is specify the name of the medical document for registration and analysis the incidence of hypertensive disease:
- A. *Medical certificate of death.*
- B. *Inpatient medical record.*
- C. *Sick list.*
- D. *Statistical card of the patient discharged from the hospital.*
- E. *Ambulatory patient coupon.\**
- 36.** For three years the patient M. had a dispensary follow-up due to pneumonia. This year, he has three times referred for medical care due to the exacerbation of the disease. These visits should be statistically considered:
- A. *Only one statistical coupon with the mark (-) for the first visit due to this exacerbation is filled.\**
- B. *Statistical coupons with the mark (+) are filled for all three primary visits.*
- C. *Statistical coupons with the mark (-) are filled for all three primary visits.*
- D. *Statistical coupons are not filled for any primary visit.*
- E. *The statistical coupon (+) is filled for the first exacerbation; the second and third exacerbations are fixed by statistical coupons with marks (-).*
- 37.** On 21.02, patient N. has visited the doctor for the first time in the given year. Diagnosis of acute respiratory illness (ARI). Determine, which of the following accounting statistical medical document should the doctor fill in this case?
- A. *Urgent report on the case of infectious disease should be filled.*
- B. *The statistical coupon should be filled, but the mark (+) should be absent.*
- C. *It is not necessary to fill in the statistical coupon for registration of final diagnoses.*
- D. *Statistical coupon for registration of the final (specified) diagnoses with the mark (+).\**
- E. *Statistical coupon for registration of final (specified) diagnoses with the mark (-).*

**38.** The patient has visited the doctor of the rural medical ambulance twice during the calendar year (in March and in November). In two cases he was diagnosed with the same diagnosis – ARVI. How of the following the “Statistical Coupons for registration of final (specified) diagnoses” should be filled in to account these cases of diseases?

- A. *For each case individually marked “–”.*
- B. *For each case individually marked with “+”.\**
- C. *The first case – marked with “+” and the second one – marked with “–”.*
- D. *For the first case marked with “+”, the second – is not filled.*
- E. *Not filled in for any of the cases.*

**39.** A patient visited the polyclinic due to acute tracheitis on 10.03 and 14.05. In this case, it is necessary to fill:

- A. *Two statistical coupons for registration of specified diagnosis with mark “+”.\**
- B. *Two statistical coupons for registration of specified diagnosis marked with “–”.*
- C. *Two statistical coupons for registration of specified diagnosis marked with “–” and one coupon marked with “+”.*
- D. *One statistical coupon for registration of specified diagnosis with mark “+”.*
- E. *One statistical coupon for registration of specified diagnosis marked with “+” and one coupon marked with “–”.*

**40.** Patient K. has referred for the first time in a calendar year with the diagnosis of gastric ulcer, which was established last year. Determine how the statistic coupon is filled in correctly from the following?

- A. *Statistical coupon is not filled in.*
- B. *Statistical coupon is filled in, but without any mark.*
- C. *Statistical coupon is filled in with mark (+).*
- D. *Statistical coupon is filled in with mark (–).\**
- E. *Marks (+) and (–) in the statistical coupon.*

**41.\*\*** The patient has visited the doctor of the rural medical ambulance twice during the calendar year (in March and in November). In both cases, he was diagnosed with the same disease an acute respiratory viral infection. What documents must be filled in to register these diseases?

- A. *For each case a separate statistical coupon with mark “–”.*
- B. *For each case, a separate statistical coupon marked “+”.\**
- C. *For the first case a statistical coupon marked with “+”, for the second – is not filled.*
- D. *The first case – a statistical coupon marked with “+” and for the second one – marked with “–”.*
- E. *Statistical coupon is not filled in for any of the cases.*

**42.\*\*** For three years, the patient M. has been at the dispensary follow-up in the polyclinic due to chronic bronchitis. This year, he has three times referred for medical care due to this disease. Determine, which statistical documents should be filled in to account this disease?

- A. *One statistical coupon for the primary case is filled with a mark (–).*



- B. One statistical coupon for the primary case is filled with a mark (+).*
- C. One statistical coupon with the mark (+) is filled in for the primary case and with the mark (-) for repetitions.*
- D. For all three cases, statistical coupons are filled with a mark (-).\**
- E. For all three cases, statistical coupons are filled with a mark (+).*
- 43.\*\*** The worker, who is under the dispensary follow-up due to gastric ulcer, referred in the current year with the exacerbation of given disease in February, May and September. How to register this case statistically?
- A. One statistical coupon at the first visit with a mark (+) and two stat. coupons with mark (-).*
- B. One statistical coupon with the mark (-) at the first visit in the current year.\**
- C. One outpatient coupon with code 2 and two coupons with code 3.*
- D. Three statistical coupons for each visit with a mark (-).*
- E. Three coupons for an ambulatory patient with code 2.*
- 44.\*\*** A 2 year old child had an ARVI in February, April and October during the year. Last year, he had the same diagnosis in September and December. How to register these cases this year?
- A. Fill in one statistical coupon with mark (-).*
- B. Fill in one statistical coupon with mark (+).*
- C. Fill in one statistical coupon with mark (+) and two with mark (-).*
- D. Fill in three statistical coupons with mark (-).*
- E. Fill in three statistical coupons with mark (+).\**
- 45.\*\*** The study of infectious disease incidence is based on the special consideration of the relevant diseases due to the necessity of operative anti-epidemic measures. Which medical records are used to register the incidence of dysentery?
- A. Journal of infectious diseases accounting.*
- B. Examination account card.*
- C. Sick list.*
- D. Statistical card of the patient discharged from the hospital.*
- E. Emergency notice.\**
- 46.\*\*** The doctor is instructed to study infectious disease incidence in the city. What is the main accounting document for registration and study of infectious diseases?
- A. Card of the patient discharged from hospital.*
- B. Vaccination Registration Card.*
- C. Outpatient medical record.*
- D. Final diagnosis registration coupon.*
- E. Emergency notice.\**
- 47.** After the examination, the child was diagnosed with epidemic parotitis. Which of the following document should be filled in to account this disease?
- A. Control card of the dispensary follow-up.*
- B. Outpatient medical record.*
- C. Inpatient medical record.*

*D. Ambulatory patient coupon.*

*E. Expedited report of infectious disease.\**

**48.\*\*** A female worker diagnosed with "acute dysentery", a health post doctor has referred to the hospital's infectious disease ward. Which document should be used to account this disease?

*A. Outpatient medical record.*

*B. Inpatient medical record.*

*C. Statistical card of the patient discharged from the hospital.*

*D. Statistical coupon for registration of the final (specified) diagnoses.*

*E. Expedited report of infectious disease.\**

**49.\*\*** During the examination of a five year old child, the pediatrician has established the fact of the diphtheria. During what time should the doctor inform the Sanitary and Epidemiological Service about this case?

*A. 12 hours.\* B. 24 hours. C. 36 Hours. D. 48 Hours. E. 72 hours.*

**50.** The patient who works in the furniture factory shop, where the furniture is covered with paints and varnish has visited the doctor-therapist of the district polyclinic. Complaints of the patient and objective data testified the acute professional poisoning. The doctor temporarily freed the patient from work, prescribed treatment and filled the "Emergency notice". To which of the following institutions he should send it?

*A. To the health-care department of the enterprise.*

*B. To the institutions of sanitary-epidemiological service.\**

*C. To a specialized clinic that confirms the disease.*

*D. To a chief physician of the medical sanitary station.*

*E. To the enterprise where the patient works.*

**51.** According to the population's health encounters, different types of morbidity can be studied. What of the following refers to one of the morbidity types studied from the data of the visits?

*A. Circulatory system morbidity.*

*B. Incidence of the most important diseases.\**

*C. Chronic morbidity.*

*D. Acute morbidity.*

*E. Incidence of respiratory diseases.*

**52.** Diseases of the circulatory system (BSD) are among the diseases that caused the chronic type of pathology of the population. Which of the following disease of this class occupies the first place in the structure of the incidence of circulatory system diseases in the population of Ukraine?

*A. Active rheumatism.*

*B. Hypertensive disease.\**

*C. Diseases of arteries, arterioles and capillaries.*

*D. Coronary heart disease.*

*E. Cerebro-vascular diseases.*

- 53.** Medical and social importance of diseases of circulatory system is determined by large economic losses for the society due to their leading role in mortality and disability of the population, morbidity with temporary disability and others. Determine which of the following place in the structure of mortality of the population of Ukraine occupy diseases of the circulatory system?  
*A. First place.\*                      C. Third place.                      E. Fifth place.*  
*B. Second place.                      D. Fourth place.*
- 54.** The main causes of mortality of the population of Ukraine are diseases of the circulatory system, neoplasms, injuries, accidents and poisonings. Determine, which of the following place in the structure of population mortality belongs to neoplasms?  
*A. First place.                      C. Third place.                      E. Fifth place.*  
*B. Second place.\*                      D. Fourth place.*
- 55.** Injuries, accidents and poisoning are in the group of the main causes of mortality of the population of Ukraine. Indicate, which of the following place takes this cause in the structure of mortality of population of Ukraine:  
*A. First place.                      C. Third place.\*                      E. Fifth place.*  
*B. Second place.                      D. Fourth place.*
- 56.** Primary health care physicians play a significant role in the early detection of malignant neoplasms. During which of the following time in case of diagnosis of malignant neoplasms the doctor should fill in and send to the oncology center the Accounting form 090/y?  
*A. Immediately.                      C. Within a week.                      E. After re-examination.*  
*B. Not later than 3 days.\*                      D. Within 10 days.*
- 57.** The structure of malignant neoplasms incidence has gender peculiarities. Which of the following diseases occupies the first place in the structure of cancer incidence in the male population?  
*A. Gastric cancer.                      C. Lung cancer.\*                      E. Liver cancer.*  
*B. Skin cancer.                      D. Bladder cancer.*
- 58.** Which of the following is the unit of monitoring in the study of hospitalized morbidity:  
*A. Every case of hospitalization.\*                      D. Duration of patient's stay in hospital.*  
*B. Bed-day.                      E. Total hospitalization cases.*  
*C. Bed turnover.*
- 59.** The chief physician provided statistical data on the incidence of hospitalization of the population of the district in order to analyze the hospital activity. On which of the following statistical document were these data calculated?  
*A. Diary of a doctor.*  
*B. Case history.*  
*C. Leaf of patients' movement in the hospital.*  
*D. The statistical card of the patient discharged from hospital.\**  
*E. Statistical coupon for registration of the final (specified) diagnosis.*

**60.** Determine which of the following basic accounting document at advanced study of morbidity with temporary disability in an industrial enterprise:

- A. *Card of personal morbidity accounting.*\*
- B. *Sick list.*
- C. *Outpatient medical record.*
- D. *Inpatient medical record.*
- E. *"Report on the causes of temporary disability".*

**61.** There are data on the number of employees, the number of cases of diseases with temporary disability at the plant N. Which of the following indicator can be calculated according to the form 23BH?

- A. *Average duration of one case of disability from all diseases.*
- B. *The structure of cases and days of disability due to individual illnesses.*
- C. *Number of days of disability per 100 employees.*
- D. *Number of cases of disability per 100 employees.*\*
- E. *The specific weight of those who are ill.*

**62.** Morbidity with temporary disability is studied on the basis of official statistical documents. Determine, which of the following documents is used in the study of this morbidity?

- A. *Medical certificate of death.*
- B. *The card of the patient discharged from the hospital.*
- C. *Sick list.*\*
- D. *Information on population morbidity.*
- E. *Doctor's appointment slip.*

**63.\*\*** There are 1,200 cases of disability and 12,000 days of disability in the industrial enterprise. What indicator of morbidity with temporary disability should be calculated from this data?

- A. *Percentage of sickly persons.*
- B. *Percentage of workers who have never been sick during the year.*
- C. *Average duration of one case.*\*
- D. *Number of days of disability per 100 employees.*
- E. *Number of cases of disability per 100 employees.*

**64.\*\*** The workshop doctor forms a group of sick people for deepen follow-up. For this he takes into account the number of etiologically related cases with temporary disability during the last year of each worker. What should this quantity be for the employee to be referred to the specified group?

- A. *1 and more.*
- B. *2 and more.*
- C. *3 and more.*
- D. *4 and more.*\*
- E. *6 and more.*

\*\* – test tasks are required in preparation for the KROK exams

## **CONTROL QUESTIONS**

1. Kinds of morbidity depending on medico-social and economic importance.
2. Requirements for a separate study of these types of morbidity.
3. General morbidity, definition.
4. The analysis of the general morbidity of the population according to the population's referral to the health facility.
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7. Accounting documents of general and primary morbidity of the population.
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*Навчальне видання*

# **МЕДИКО-СОЦІАЛЬНІ ПРОБЛЕМИ ЗАХВОРЮВАНОСТІ: ВИДИ І АНАЛІЗ ЗАХВОРЮВАНОСТІ**

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спеціальностей 222 «Медицина» та 228 «Педіатрія»  
з дисципліни «Соціальна медицина,  
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