

For assessment of the material objects of culture the following criteria were chosen:

1. density of objects of historical and cultural value on 100 thousand sq.km;
2. cultural significance of objects of historical and cultural heritage;
3. specific structure of objects of historical and cultural heritage.

As the quantitative indices of the offered criteria for assessment of ecotourist resources are various, for their comparison and deduction of a uniform index of usefulness of a combination of natural resources and cultural and historical capacity of the territory it is recommended to transform indicators to mark values. Will be also a three-stage scale of ranging of indexes enough.

For development of a technique of assessment of esthetic appeal of the territory to development of ecotourism methods of medicobiological and esthetic estimates were used.

The offered technique of assessment of esthetic appeal of the territory to development of ecotourism was approved at estimation of the Brest and Grodno regions in a section of administrative regions.

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ECOLOGICAL AND EPIDEMIOLOGICAL ASPECTS OF THE INCIDENCE OF MALIGNANT NEOPLASMS OF THE LUNG

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In Belarus lung cancer is on the 1st place in the structure of cancer incidence. Lung cancer is a serious health and social problem in the developed countries it is the most common cancer and the most common cause of death from cancer. The focus is on two factors: the first factor – is to strengthen air pollution, the second important factor – the increase in tobacco use.

Keywords: lung cancer, overgrowth and gender dynamics, carcinogenic factors, harm of smoking, the effect of environmental factors on cancer

The object of the study was the official statistical indicators of the Belarusian Cancer Registry "Statistics of Oncological Diseases", the data of the European database on the incidence and mortality of the population of the Republic of Belarus from lung cancer in the period from 2002 to 2016.

The aim of the study is to study the epidemiological aspects of diseases of the population of the Republic of Belarus with lung cancer, as well as assess the medical and social significance of the problem in people's lives.

In the work, extensive rates of morbidity, rates of increase in morbidity, cumulative risk, prognostic index and relative epidemiological risk were calculated. Methods of system analysis and mathematical-statistical research methods were used for this[1, 2, 3].

As a result of a retrospective analysis of the incidence of malignant neoplasms in the lungs of the Republic of Belarus for the period from 2002 to 2016. we can draw the following conclusions:

- lung cancer occupies the first place in the structure of oncological morbidity; the number of men with lung cancer exceeds the number of sick women 9–10 times;
- for the period from 2002 to 2016 there was an unstable tendency to reduce the incidence of lung cancer in the Republic of Belarus ($R^2 = 0.469$);
- the peak incidence falls on the age group of 65–75 years, and the minimum incidence is among the 0–24 age group;
- the prevalence of smoking among adults has declined. In 2013 and 2014, per capita consumption began to decline significantly, for 2014 consumption was about 22.8 billion pieces per year, which is 12% less than in the previous year;
- during the studied period, there is a pronounced tendency to reduce the death rate of the population of the Republic of Belarus from lung cancer ($R^2 = 0.9443$);
- the degree of relative epidemiological risk for the population of the Republic of Belarus is moderate.
- changes in the cumulative index for the years of observation reflect a decrease in the risk of mortality. The average cumulative risk of death in men was 27.60%. The average cumulative risk of death in women was 2.25%;

• for a given period of observation, the degree of risk of illness is characterized as moderate. The largest value of COED is observed in 2012 – 1.0374, the smallest – in 2014 – 0.1020. A sharp decrease in CDER in 2014 is associated with a decrease in the incidence rate.

Important is the formation of high-risk groups and the rehabilitation of identified risk factors.

Thus, at the present time in the Republic of Belarus there is a decrease in the incidence of lung cancer, which may be due to aging of the population and other factors, including lifestyle factors (in particular tobacco abuse, malnutrition), the use of certain medications, production environment.

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ESTIMATION OF THE LEVEL OF RADIOACTIVE EXPOSURE ON SEPARATE COMPONENTS OF FOREST ECOSYSTEMS OF THE BELARUSIAN POLESIE

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Pollution of vegetation is associated with the root consumption of elements of mineral nutrition by absorbing radionuclides from the soil. This process depends on many factors, among which the main are the properties of radionuclides and the forms of their location in the soil, the physical and chemical parameters of the soil, the biological characteristics of plants, weather and climate conditions.

Keywords: pollution of forest ecosystems, accumulation of radionuclides, transfer coefficients of radionuclides.

One of the main factors of anthropogenic impact on nature is pollution of the environment by radionuclides that fell as a result of nuclear weapons tests and accidents at nuclear power facilities. Accumulation of radioactive substances by plant complexes is the most important environmental problem in the Republic of Belarus, which arose in connection with the Chernobyl accident.

Prior to the Chernobyl accident, the radiation situation in Belarus was mainly determined by natural radionuclides: 40K, 232Th, 238U.

The maximum contribution to the value of the natural radiation background is 40K. Most of it on clays and loams, a lower content – on sandy loams and sands, and even less is found on peaty-marsh soils. Uranium and thorium in the earth's crust are found in tens and hundreds of times less than 40K.

As a result of the nuclear weapons test, artificial radionuclides – 137Cs, 90Sr, 144Ce, 106Ru, 238, 239, 240Pu – entered the territory of the republic.

Forest ecosystems fulfill their natural functions and are a natural barrier to the flow of radionuclides and prevent their secondary redistribution. Forests have shown themselves as a battery of radioactive fallout, having accumulated a large number of radionuclides. For 30 years the area of contaminated forest land has decreased from 25% to 18%.

One way to assess the dynamics of the transition of radionuclides to vegetation is to analyze data on the change in radionuclide transport coefficients over time.

According to the data, the mean value of ¹³⁷Cs transfer coefficient to pine wood is 2,4 (10–3 m²/kg) with minimum and maximum values of 0,03 and 23,3 (10–3 m²/kg), respectively. Also in the reports are data on the coefficients of accumulation, calculated as the ratio of the specific activity of the radionuclide in the raw tissue to its specific activity in dry soil. For coniferous plantations in the case of cesium, they range from 0,003 to 3,5; and its average value is 0,36 [1].