

ЛД-16 ИН

**Federal State Budgetary Educational Institution of Higher Education
«North-Ossetia State Medical Academy»
of the Ministry of Healthcare of the Russian Federation**



APPROVED

Rector

O.V. Remizov

«24» May, 2023

**EDUCATIONAL TRAINING PROGRAM OF DISCIPLINE
"Occupational diseases"**

the main professional educational program of higher education - specialty program in the
specialty 31.05.01 General Medicine, approved in 24.05.2023

Form of education Full-time

The period of development 6

Department of Internal Diseases №2

When developing an educational training program, the discipline is based on:

1. Federal State Educational Standard of Higher Education on specialty 31.05.01 General Medicine, approved by the Ministry of Education and Science of the Russian Federation on February 9, 2016 №95
2. Academic plan on special ЛД 16-03-18ИИ
ЛД 16-04-19ИИ
ЛД 16-05-20ИИ, approved by the Scientific Council of the Federal State Budgetary Educational Institution of Higher Education «North-Ossetia State Medical Academy» of the Ministry of Healthcare of the Russian Federation «24» МаИ, 2023, Protocol № 8.
3. The working programme of the discipline was approved at the meeting of the Department of Internal Medicine 20 on March, 2023, Minutes No. 8
4. The working programme of the discipline was approved at the meeting of the Central Coordination Educational and Methodological Council of «23» March, 2023, Protocol № 5.
5. The working programme of the discipline has been approved by the Academic Council of the Federal State Budgetary Educational Establishment of Higher Education NOSMA of the Ministry of Health of Russia on May 24, 2023, Protocol № 8

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Content of the work programme

1. name of the discipline;
2. list of planned learning outcomes of the discipline, correlated with the planned outcomes of the educational programme;
3. indication of the place of the discipline in the structure of the educational programme;
4. volume of discipline in credit units with indication of number of academic or astronomic hours assigned for contact work of students with instructor (by types of classes) and for independent work of students;
5. content of discipline structured by topics (sections) with indication of number of academic or astronomic hours and types of classes;
6. list of teaching materials for independent work of students in the discipline;
7. fund of grading tools for intermediate attestation of students of the course;
8. list of basic and additional educational literature necessary for mastering the discipline;
9. the list of resources of information and telecommunication network "Internet" (hereinafter referred to as "Internet") necessary for mastering the discipline;
10. methodical instructions for students on mastering the course;
11. list of information technologies used in the educational process of the discipline including the list of software and information references systems (if necessary);
12. description of material and technical basis necessary for the educational process of the discipline.
13. Introduction of educational activities using e-learning and distance learning technologies.

2. The list of planned learning outcomes in the discipline and the results of mastering the educational program

No.	Number/ index competent tions	Content competence (or its parts)	Development results		
			know	be able to	own
one.	GPC-8	Occupational diseases of dust etiology.	<ul style="list-style-type: none"> - the main types of drugs used in the treatment of occupational diseases of dust etiology - the main drugs, their international non-proprietary name, the rules for combining drugs with each other; - the rules for prescribing and taking medications; 	<ul style="list-style-type: none"> - prescribe appropriate drug therapy according to the diagnosis; - choose the best treatment option, prescribe drug therapy, taking into account the pharmacokinetics and pharmacodynamics of drugs, preventing their unwanted side effects, write prescriptions (taking into account social rights to subsidized drugs); 	<ul style="list-style-type: none"> - methods of prescribing appropriate drug therapy, as well as a combination of drugs; - methods for assessing and monitoring the effectiveness of the therapy;
2.	PC-1	Occupational diseases of dust etiology.	<ul style="list-style-type: none"> - indicators of public health; - factors shaping human health (environmental, professional); - principles of prevention of the most common diseases; - organization of preventive measures for labor protection; 	<ul style="list-style-type: none"> - to assess the state of health of the population and the influence of factors of the working environment on it; - to use methods of primary and secondary prevention (based on evidence-based medicine) in treatment; 	<ul style="list-style-type: none"> - the skills of presenting an independent point of view; - skills of analysis and logical thinking; - methods of sanitary and educational work; - methods of primary and secondary prevention;
3.	PC-5	Occupational diseases of dust etiology.	<ul style="list-style-type: none"> - the main clinical symptoms of occupational diseases of dust etiology and the mechanism of their occurrence; - diagnostic significance of general clinical laboratory and instrumental research methods; 	<ul style="list-style-type: none"> - to conduct a questioning of the patient (and / or) relatives, establishing the possible causes of its occurrence in typical cases; - conduct a physical examination of the patient and identify the objective signs of the disease; - draw up a plan for additional research of the patient; 	<ul style="list-style-type: none"> - the methods of general clinical examination, the interpretation of the results of laboratory and instrumental diagnostic methods, the correct maintenance of medical records;

				<ul style="list-style-type: none"> -evaluate the results of a general analysis of blood, urine, sputum, feces, as well as a biochemical blood test; -be able to present the results of the patient's examination orally and in writing 	
4.	PC-6	Occupational diseases of dust etiology.	<ul style="list-style-type: none"> -etiology, pathogenesis, clinical picture, principles of diagnosis and differential diagnosis; -principles of treatment of the main groups of occupational diseases. -Examination of working capacity; 	<ul style="list-style-type: none"> - to conduct a general clinical examination; - outline the volume of additional studies to clarify the diagnosis and obtain a reliable result; 	<ul style="list-style-type: none"> - methods of general clinical examination; - interpretation of the results of laboratory, instrumental diagnostic methods; -algorithm for a detailed clinical diagnosis;
5.	PC-8	Occupational diseases of dust etiology.	- features of the course of the most common occupational diseases	-develop a plan of diagnostic and therapeutic actions in accordance with the diagnosis;	<ul style="list-style-type: none"> -the main medical diagnostic and therapeutic measures; - an algorithm for a detailed clinical diagnosis; - write an appointment sheet for the patient;
6.	GPC-8	Occupational diseases caused by exposure to physical factors of the working environment.	<ul style="list-style-type: none"> -the main types of drugs used in the treatment of occupational diseases; - the main drugs, their international non-proprietary name, the rules for combining drugs with each other; - the rules for prescribing and taking medications; 	<ul style="list-style-type: none"> - prescribe appropriate drug therapy according to the diagnosis; - choose the best treatment option, prescribe drug therapy, taking into account the pharmacokinetics and pharmacodynamics of drugs, preventing their unwanted side effects, write prescriptions (taking into account social rights to subsidized drugs); 	<ul style="list-style-type: none"> - methods of prescribing appropriate drug therapy, as well as a combination of drugs; -methods for assessing and monitoring the effectiveness of the therapy;
7.	PC-1	Occupational diseases caused by exposure to physical factors of the working environment	<ul style="list-style-type: none"> - indicators of public health; - factors shaping human health (environmental, professional); - principles of prevention of the most common diseases; 	<ul style="list-style-type: none"> - to assess the state of health of the population and the influence of factors of the working environment on it; - to use methods of primary and 	<ul style="list-style-type: none"> - the skills of presenting an independent point of view; - skills of analysis and logical thinking; - methods of sanitary and educational work;

			organization of preventive measures for labor protection;	secondary prevention (based on evidence-based medicine) in treatment;	methods of primary and secondary prevention;
eight.	PC-5	Occupational diseases caused by exposure to physical factors of the working environment	- the main clinical symptoms of occupational diseases; -diagnostic significance of general clinical laboratory and instrumental research methods;	- to conduct a questioning of the patient (and / or) relatives, establishing the possible causes of its occurrence in typical cases; -conduct a physical examination of the patient and identify the objective signs of the disease; - draw up a plan for additional research of the patient; -evaluate the results of a general analysis of blood, urine, sputum, feces, as well as a biochemical blood test; -be able to present the results of the patient's examination orally and in writing	-the methods of general clinical examination, the interpretation of the results of laboratory and instrumental diagnostic methods, the correct maintenance of medical records;
9.	PC-6	Occupational diseases caused by exposure to physical factors of the working environment	-etiology, pathogenesis, clinical picture, principles of diagnosis and differential diagnosis; -principles of treatment of the main groups of occupational diseases. -Examination of working capacity;	- to conduct a general clinical examination; - outline the volume of additional studies to clarify the diagnosis and obtain a reliable result;	methods of general clinical examination; - interpretation of the results of laboratory, instrumental diagnostic methods; -algorithm for a detailed clinical diagnosis;
10.	PC-8	Occupational diseases caused by exposure to physical factors of the working environment	- features of the course of the most common occupational diseases;	-develop a plan of diagnostic and therapeutic actions in accordance with the diagnosis;	-the main medical diagnostic and therapeutic measures; - an algorithm for a detailed clinical diagnosis; - write an appointment sheet for the patient;
eleven.	GPC-8	Occupational diseases caused by exposure to	-the main types of drugs used in the treatment of occupational diseases;	- prescribe appropriate drug therapy according to the diagnosis; - choose the best treatment option,	- methods of prescribing appropriate drug therapy, as well as a combination of drugs;

		chemical factors of the working environment.	<ul style="list-style-type: none"> - the main drugs, their international non-proprietary name, the rules for combining drugs with each other; - the rules for prescribing and taking medications; 	<p>prescribe drug therapy, taking into account the pharmacokinetics and pharmacodynamics of drugs, preventing their unwanted side effects, write prescriptions (taking into account social rights to subsidized drugs);</p>	<p>-methods for assessing and monitoring the effectiveness of the therapy;</p>
12.	PC-1	Occupational diseases caused by exposure to chemical factors of the working environment.	<ul style="list-style-type: none"> - indicators of public health; - factors shaping human health (environmental, professional); - principles of prevention of the most common diseases; - organization of preventive measures for labor protection; 	<ul style="list-style-type: none"> - to assess the state of health of the population and the influence of factors of the working environment on it; - to use methods of primary and secondary prevention (based on evidence-based medicine) in treatment; 	<ul style="list-style-type: none"> - the skills of presenting an independent point of view; - skills of analysis and logical thinking; - methods of sanitary and educational work; - methods of primary and secondary prevention;
thirteen.	PC-5	Occupational diseases caused by exposure to chemical factors of the working environment.	<ul style="list-style-type: none"> - the main clinical symptoms of occupational diseases; -diagnostic significance of general clinical laboratory and instrumental research methods; 	<ul style="list-style-type: none"> - to conduct a questioning of the patient (and / or) relatives, establishing the possible causes of its occurrence in typical cases; -conduct a physical examination of the patient and identify the objective signs of the disease; - draw up a plan for additional research of the patient; -evaluate the results of a general analysis of blood, urine, sputum, feces, as well as a biochemical blood test; -be able to present the results of the patient's examination orally and in writing 	<p>-the methods of general clinical examination, the interpretation of the results of laboratory and instrumental diagnostic methods, the correct maintenance of medical records;</p>
	PC-6	Occupational diseases caused by exposure to chemical factors of the working environment.	<ul style="list-style-type: none"> -etiology, pathogenesis, clinical picture, principles of diagnosis and differential diagnosis; -principles of treatment of the 	<ul style="list-style-type: none"> - to conduct a general clinical examination; - outline the volume of additional studies to clarify the diagnosis and 	<ul style="list-style-type: none"> - methods of general clinical examination; - interpretation of the results of laboratory, instrumental diagnostic

			main groups of occupational diseases. -Examination of working capacity;	obtain a reliable result;	methods; -algorithm for a detailed clinical diagnosis;
14.	PC-8	Occupational diseases caused by exposure to chemical factors of the working environment.	- features of the course of the most common occupational diseases;	-develop a plan of diagnostic and therapeutic actions in accordance with the diagnosis;	-the main medical diagnostic and therapeutic measures; - an algorithm for a detailed clinical diagnosis; - write an appointment sheet for the patient;

3. Place of discipline in the structure of the educational program.

The academic discipline "Occupational Diseases" belongs to the basic part of the program of Block 1. Federal State Educational Standard of Higher Education in the specialty 31.05.01 General Medicine.

4. Scope of the discipline

No. No. p / p	Type of work	Total credit units	Total hours	Semester
				7
				hours
one	Contact work of students with teacher (total), including:	1.5	54	54
2	Lectures (L)	0.5	eighteen	eighteen
3	Clinical Practices (CL)	one	36	36
4	Student independent work (IWS)	0.5	eighteen	eighteen
5	Intermediate type appraisals	credit (C)		zach
		exam (E)		
6	TOTAL: General labor intensity	hours	72	72
		ZET	2	2

5. Content of the discipline

No./n	Semester number	The name of the topic (section) of the discipline	Forms of monitoring of progress				
			L	PZ	CPC	Total	
one	2	3	4	6	7	eight	9
one.	7	Introduction to the clinic of occupational diseases. Historical stages in the development of occupational diseases. Deontological aspects. Preliminary and periodic inspections. Pneumoconiosis. Silicosis. Silicatose.	6	5	2.5	13.5	C, T3, C3 Y3
2.	7	Chronic dusty bronchitis. Exogenous allergic alveolitis.	2	5	2.5	9.5	C, T3, C3 Y3
3.	7	Beriliosis. Occupational bronchial asthma		5	2.5	7.5	C, T3, C3 Y3
4.	7	Lead intoxication. Intoxication with tetraethyl lead.	2	5	2.5	9.5	C, T3, C3 Y3

5.	7	Occupational diseases of medical workers. Intoxication with aromatic hydrocarbons. Intoxication with amino and nitro compounds. manganese intoxication. Mercury intoxication.	6	5.5	2.5	14	C, T3, C3 Y3
6.	7	Vibration disease: the impact of local and general vibration on the human body. Functional research methods. Peripheral hemodynamic studies.	2	5	2.5	9.5	C, T3, C3 Y3
thirteen.	7	Modular lesson		5.5	3	8.5	C, T3, Y3
TOTAL:			eighteen	36	eighteen	72	

Note: C - interview, TK - test tasks, SZ - situational tasks, UZ - educational tasks

6. The list of educational and methodological support for independent work of students in the discipline.

No./n	Semester number	Name of educational and methodological development
one.	7	MM. Tebloyev Situational and clinical tasks for students of the Medical Academy in the course "Occupational Diseases".
2.	7	MM. Tebloyev Methodological manual for the course of occupational diseases for students of medical and pediatric faculties.
3.	7	MM. Tebloyev Introduction to the clinic of occupational diseases. Methodical instructions for students ..
4.	7	MM. Tebloyev Test control in occupational diseases for students of the medical, pediatric and medical-preventive faculties.
5.	7	MM. Tebloyev Tasks in medical deontology for students of medical, pediatric and preventive medicine faculties at the rate of "occupational diseases".
6.	7	MM. Tebloyev Issues of medical deontology and the peculiarities of the organization of medical and social examination of victims at work with occupational diseases.
7.	7	MM. Tebloyev Intensification of programmed training and control of students in occupational diseases (control tasks).
eight.	7	MM. Tebloyev Intensification of programmed training and control of students in

		occupational diseases (answers to control tasks).
9.	7	MM. Tebloyev. Preliminary and periodic medical examinations of workers in hazardous working conditions (guidelines).
10.	7	MM. Tebloyev. Occupational neurotoxicosis - Mercury.
eleven.	7	MM. Tebloyev. Silicosis.
12.	7	MM. Tebloyev Examination of patients with occupational diseases.
thirteen.	7	MM. Tebloyev Classification of pneumocanioses.
14.	7	MM. Tebloyev Examination of working capacity and issues of rehabilitation for vibration sickness.
15.	7	MM. Tebloyev. A.B. Kusova Methodical recommendations for the implementation of independent extracurricular work of 4th year students of the Faculty of General Medicine in occupational diseases.

7. Fund of assessment tools for intermediate certification of students in the discipline

No./n	List of competencies	No. semester	Indicator (s) evaluating	Evaluation criterion (s)	Grading scale	Name FOS
one	2	3	4	5	6	7
	OPK-8 PC-1 PC-5 PC-6 PC-8	7	see the standard for assessing the quality of education, approved. By order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated July 10, 2018, No. 264 / o	see the standard for assessing the quality of education, approved. By order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated July 10, 2018, No. 264 / o	see the standard for assessing the quality of education, approved. By order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated July 10, 2018, No. 264 / o	Exam tickets for the exam; Test tasks;

8. The list of basic and additional educational literature necessary for mastering the discipline

p / no	Name	Authors)	Year, place of publication	Number of copies		EBS name / Link in EBS
				in library	on ka-fedra	
one	2	3	4	7	eight	9
Main literature						
1.	Occupational diseases	V.G. Artamonova ON THE. Mukhin	Moscow: Medicine 2006.	178	-	
2.	Occupational diseases	V.V. Kosarev S.A. Babanov	M.: GEOTAR- Media 2010.	33	-	"Student advisor" http://www.studmedlib.ru/book/ISBN9785970414347.html
3.	Occupational diseases	ON THE. Mukhin, V.V. Kosarev, S.A. Babanov, V.V. Fomin	M.: GEOTAR- Media 2013.	-	-	"Student advisor" http://www.studmedlib.ru/book/ISBN9785970424025.html
4.	Occupational diseases	Under. ed. N.F. Izmerova	M.: Academy 2011.	25	one	

5.	Occupational diseases	ON THE. Mukhin, V.V. Kosarev, S.A. Babanov, V.V. Fomin	M.: GEOTAR- Media 2016.	-	-	"Student advisor" http://www.studmedlib.ru/book/ISBN9785970436660.html
additional literature						
6.	Physiotherapy of occupational diseases and radiation injuries	L.A. Podberezkina	M.: GEOTAR- Media 2011	-	-	"Student advisor" http://www.studmedlib.ru/book/970411841V0038.html
7.	Occupational medicine. Introduction to the specialty.	N.F. Izmerov, A.A. Kasparov	M.: Medicine, 2002.	3		
8.	Occupational Safety and Occupational Health: A Guide for Physicians	A.G. Khrupachev, A.A. Khadartseva	M.: GEOTAR- Media 2012.			"Student advisor" http://www.studmedlib.ru/book/06-COS-2349.html

СОГЛАСОВАНО
Зав. библиотекой

Лоз- В. Логматка

9. The list of resources of the information and telecommunication network "Internet" required for the development of the discipline.

1. "Student advisor"

<http://www.studmedlib.ru/book/ISBN9785970414347.html>

<http://www.studmedlib.ru/book/ISBN9785970424025.html>

<http://www.studmedlib.ru/book/06-COS-2349.html>

<http://www.studmedlib.ru/book/970411841V0038.html>

<http://www.studmedlib.ru/book/ISBN9785970436660.html>

2. Standards of medical care:

<http://www.rspor.ru/index.php?mod1=standarts3&mod2=db1>

3. State register of medicines: <http://www.drugreg.ru/Bases/WebReestrQuery.asp>

4. Russian Encyclopedia of Medicines (RLS): <http://www.rlsnet.ru>

5. Directory Vidal. Medicines in Russia: <http://www.vidal.ru>

6. Interregional Society of Evidence-Based Medicine Specialists.

<http://www.osdm.org/index.php>

9. Russian Scientific Medical Society of Physicians <http://www.rnmot.ru/>

Electronic versions of magazines:

Consiliummedicum (magazine) <http://con-med.ru/>

Attending physician (journal) www.lvrach.ru

Kosarev V.V. S.A. Babanov "Occupational diseases of medical

employees "Samara 2009" <http://www.zdrav.ru/library/publications/detail.php?ID=2001>

10. Methodological instructions for students on the development of disciplines

Training consists of classroom lessons (54 hours), including a lecture course and practical exercises, and independent work (18 hours). The main study time is allocated for practical work on methods of diagnosis and treatment of occupational diseases.

When studying the discipline of occupational diseases, it is necessary to use knowledge in the field of anatomy, normal and pathological physiology, propaedeutics of internal diseases, pharmacology, occupational hygiene and to master the practical skills necessary in the activities of a medical doctor

Practical exercises are conducted in the form of an oral interview, solving test tasks, demonstrating patients, and using visual aids, solving situational problems, answering test tasks, analyzing clinical patients.

In accordance with the requirements of the Federal State Educational Standard of Higher Education, active and interactive forms of conducting classes (classes-conferences, case-methods) are widely used in the educational process. The proportion of classes conducted in interactive forms is 30% of classroom studies.

Independent work of students implies preparation for practical exercises and includes preparation for current and intermediate control, writing a medical history of independent extracurricular work.

Work with educational literature is considered as a type of educational work in the discipline of occupational diseases and is carried out within the hours allotted for its study (in the IWS section).

Each student is provided with access to the library funds of the SOGMA and the department.

For each section of the discipline, guidelines for students and guidelines for teachers have been developed.

During the study of the academic discipline, students independently examine the patient, draw up a medical history and submit it for defense.

Writing an essay, educational medical history contribute to the formation of professional skills.

The student's work in a group forms a sense of collectivism and sociability.

Teaching students helps them develop the skills of communicating with the patient, taking into account the ethical and deontological characteristics of pathology and patients. Independent work with patients contributes to the formation of deontological behavior, accuracy, discipline.

The initial level of students' knowledge is determined by testing, the current control of mastering the subject is determined by oral questioning during classes, during clinical analyzes, when solving typical situational tasks and answering test tasks.

At the end of the study of the academic discipline, occupational diseases are credited with the use of test control, testing of practical skills, solving situational problems and an oral interview on tickets

11. The list of information technologies used in the implementation of the educational process in the discipline

Microsoft Office

PowerPoint;

Internet exploer

12. Description of the material and technical base required for the implementation of the educational process in the discipline.

The material and technical base of the department is represented by:

KB SOGMA, GBUZ RED Ministry of Health of the Republic of North Ossetia-Alania.

The total area of the educational and laboratory base of KB SOGMA is - 71m², including 33m² - study rooms, 6m² - educational and auxiliary, assistant - 8m², office of the head of the department - 12 m². This fund includes 2 study rooms. The total area of the educational and laboratory base of GBUZ RED RNO-Alania - 12 m²

Equipment of training rooms (laboratories):

classrooms in the amount of 3 (satisfactory condition), desks 25 chairs-80, (satisfactory condition). Cabinets-8 pieces, tables-7 pieces.

No. / P	equipment identification	Quantity	Technical condition
one	2	3	4
Special equipment			
1.	Computers	4	The condition is satisfactory
2.	Notebook	2	The condition is satisfactory
3.	Projector	3	The condition is satisfactory
4.	Copier technology	4	The condition is satisfactory

5.	ECG machine	one	The condition is satisfactory
Phantoms			
6.	-		
Dummies			
7.	-		
Tables			
5.	Thematic tables	twenty	The condition is satisfactory

13. Introduction of educational activities using e-learning and distance learning technologies

In the context of the introduction of restrictive measures (quarantine) associated with an unfavorable epidemiological situation, the threat of the spread of a new coronavirus infection and other force majeure events that do not allow full-time training, it is possible to study this discipline or part of it using e-learning and distance educational technologies.

Teaching the discipline in the above situations will be carried out through the development of an electronic certification of students, electronic platforms can be used. information and educational environment of the academy and / or other e-learning systems recommended for use in academia, such as Moodle, Zoom, Webinar, etc.

Lectures can be presented in video, audio, video files, "live lectures", etc.

Conducting a seminar and practical training is possible on-line, both synchronously and asynchronously. Seminars can be held in the form of a web conference.